4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

The Dhow Sailor[1]

BY RICHARD LeBARON BOWEN, JR.

I

SINCE time immemorial, cargo has been transported in sailing ships up and down the South Arabian and the East African coasts. As the medieval Sinbads and the ancients before them had done for countless centuries, so are the Arabs, Indians, and Persians today transporting cargo in sailing ships up and down these same shores. Today these sailors operate the last great fleet of deepwater sailing ships in the world, and because of the special circumstances, this fleet will probably sail on for many more centuries oblivious to the changing pace of life around it. Life for these modern sailors has changed little in the thousand years that have passed since the adventures of Sinbad the Sailor were recorded in *The Thousand and One Nights*.

The Arabs, Indians, and Persians are still able to sail their fleets of

[1] Credit for this article belongs in large part to Mr. Frederick Hunt, who, after reading the author's 'Arab Dhows of Eastern Arabia' in THE AMERICAN NEPTUNE, wrote to the Editor and asked if a follow-up might be possible, 'telling something of actual life aboard a dhow, how the crew lives, watches they stand, living conditions, what they eat, their wages, etc.' Mr. Hunt's outline has been followed almost to the letter, with some additional material added to round out the study.

Shortly after the first draft of the article was finished, the writer was very fortunate to become a member of the American Foundation for the Study of Man Arabian Expedition, which conducted archaeological investigations in South Arabia during the winter of 1950. Almost a month spent at Aden and on the south coast of Arabia, enabled the writer to collect much valuable additional first-hand data on the life of the dhow sailor. The writer is indebted to Mr. Wendell Phillips, leader of the expedition, for his assistance in making this particular phase of the study possible. The writer is deeply grateful to Prof. W. F. Albright, vice-president of the American Foundation for the Study of Man, for his guidance and assistance in numerous details in the work. The writer is also indebted to Dr. Philip K. Hitti for valuable advice on certain points.

In doing any work on the subject of dhows, one must consult what Alan Villiers has written on the subject. By sailing with the Arabs on their dhows for almost a full year Mr. Villiers has obtained an intimate picture of the dhow that the casual observer will completely miss, or the serious worker may not be able to get, as the Arabs are rather suspicious of Europeans who investigate their activities too closely. The writer of this present article has drawn on Villiers' material to round out certain aspects of this article and to supply various facts and figures for which Villiers alone is the source. Most of such material has been taken from his entertaining book, *Sons of Sinbad* (New York: Charles Scribner's Sons, 1940), which in further reference will be abbreviated to A. Villiers, *SS*.

A description of the various types of dhows mentioned by their Arabic names in this article will be found in R. LeB. Bowen, Jr., 'Arab Dhows of Eastern Arabia,' AMERICAN NEPTUNE, IX (1949), 87-132, and R. LeB. Bowen, Jr., *Arab Dhows of Eastern Arabia* (Rehoboth: Privately printed, 1949).

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

lateen-rigged dhows, which operate in the main without the aid of engines, partly because of the amazing predictability of the monsoon trade winds. For millenniums the northeast monsoon has started unfailingly about October and blown for six months, until the southwest monsoon set in about April and continued for the next six months. By a strange coincidence, these winds blow virtually parallel to the South Arabian and East African coasts. The Arabs ride their lateeners down from the north on one wind and return on the other. So convenient is the arrangement that it is probably one reason why the fair-weather lateen rig has persisted for so many centuries on the deepwater dhows in the waters of the Indian Ocean.

The *Periplus of the Erythraean Sea* (written by an anonymous Egyptian-Greek sailor in A.D. 50) tells us that the secret of the periodicity of the monsoons was discovered by Hippalus somewhat earlier and that 'from that time to the present day' ships bound for India from the Red Sea or South Arabia set a course 'straight out to sea.' It should be noted that Hippalus' find was a 'discovery' only from the Egyptian and the Greek point of view, as he discovered a secret that Indian and Arab mariners may have been carefully attempting to hide from Egyptian and Greek sailors. The original discovery of the fact that one could 'sail straight out to sea' and reach India from South Arabia, rather than by coasting, was more of a geographical than a meteorological discovery, for it was a realization of the southern projection of India (see Figure 1). Certainly no sailor in a sane mind would set a course 'straight out to sea' from South Arabia if he thought that the lands around the Erythraean Sea were oriented as shown in Figure 2.

The South Arabian kingdoms long maintained a monopoly of carrying the goods of the East via camel to the West. The Arabians collected the products of India and East Africa at the southern terminal of the famous incense route and sent these north, along with their own products, in huge camel caravans; the recipients in the north thought that all the products they received originated in South Arabia. Many writers have stated that the South Arabian kingdoms were doomed when the West discovered the secret of the periodicity of the monsoons. However, this writer feels that the monsoons had little to do with it; more important was the discovery that many of the coveted products thought to be indigenous to South Arabia actually originated in East Africa and India. After this fact was discovered, Greek and Roman shipping entered the Indian Ocean; in opening up trade with India and Africa they immediately started to slash the revenue of the South Arabians. It should be

102

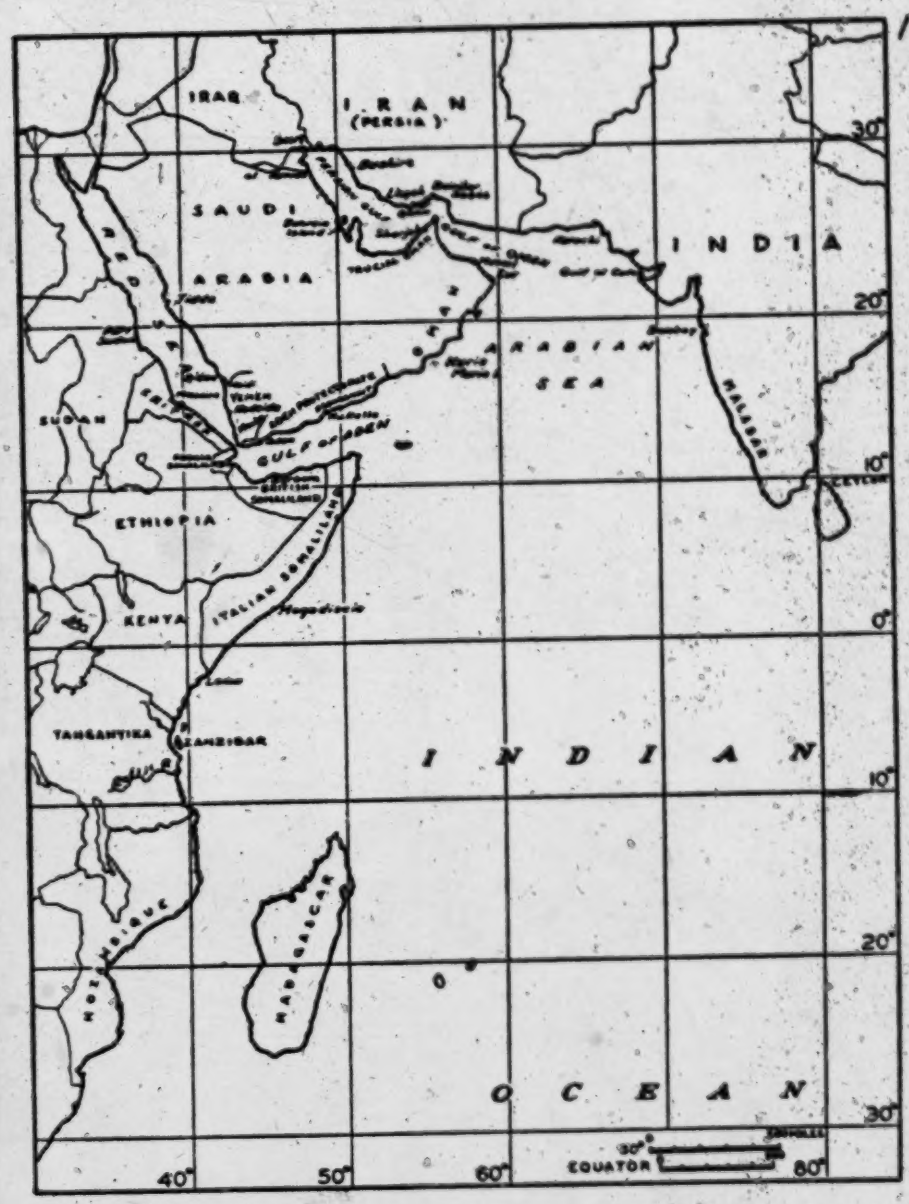

Fig. 1. Map showing the area discussed in the text. Persian Gulf dhows still coast to Zanzibar on the northeast monsoon and return on the southwest monsoon

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4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

487 noted that Western shipping could have successfully accomplished the same end by simply coasting, even if the direct southern route to India had never been discovered.

[102]

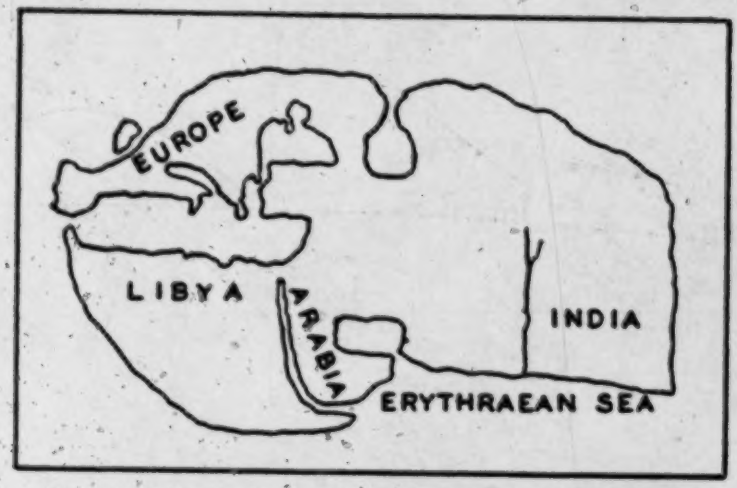

Fig. 2. The East as the ancient Greeks and Romans visualized it in the first century B.C. The map is constructed from distances and directions presented by the ancient geographers

It should also be emphasized that for the people inhabiting the coasts there was never any 'discovery' of the fact that the monsoon trade winds blew in one direction along the South Arabian and East African coasts for six months and then blew in the opposite direction for another six months; the people up and down these coasts knew it as a fact. Thus it was probably known to the Babylonians and Egyptians that the winds along the coasts in the Indian Ocean were subject to seasonal reversals. The Babylonians had organized sea trade as early as the twenty-third century B.C.

However, the fact that a ship could sail between India and Arabia directly, by a route shorter than the coasting route, had to be discovered. Whether it was the Indians or the Arabs who discovered this is not known; while we have a lack of reference to ancient Arabian shipping, there is considerable material referring to Indian shipping before the Christian era. A Buddhist record attributed to the fifth century B.C. relates that the sailors then used 'shore-finding birds' to find land.[2] They released the bird and, if it could not spot land, it returned to the boat;

[2] T. W. R. Davids, *Journal Royal Asiatic Society* (1899), p. 432.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

however, if it sighted land, it headed straight for it, showing the sailors the direction of the nearest land. Certainly this would seem to indicate voyages of more daring than mere coasting voyages. There are numerous Sanskrit and Pali references to Indian trading voyages dating from about the third century B.C., and there is one Sanskrit manuscript containing a treatise on shipbuilding in ancient India, giving the sizes (ranging up to 260 feet in length) of dozens of types of ships.[3]

Zanzibar is the unofficial southern port for the lateen fleet sailing down from the north, although the Indians sometimes go on to Madagascar. Soon after the northeast monsoon has set in, lateen craft start to come into Zanzibar. Arabs come from the Persian Gulf ports of Basra, Kuwait, Bahrein, and Sharjah on the Trucial Coast of Oman; Persians send ships from the Persian Gulf ports of Bushire, Lingeh, Qishm, and Bandar Abbas. Arabs of the Oman ports of Sur and Muscat on the Gulf of Oman and Indians from the Gulf of Cutch and the Malabar coast all send dhows down to Africa. Arab craft also sail down from Aden and Mukalla in the Hadhramaut, while the Red Sea contributes its craft from Port Sudan, Massawa, and Hodeida. Even the Somali coast contributes to the fleet arriving at Zanzibar, with dhows coming down from Djibouti, Berbera, and Mogadiscio.

Kuwait is the largest maritime and dhow-building port in the Persian Gulf, with Bahrein a very poor second. While Bahrein cannot begin to compare with Kuwait from a maritime standpoint, it probably ranks ahead of the latter as an emporium in the Persian Gulf. It serves for all the entrepôt trade to the eastern coast of Saudi Arabia, the goods coming into Bahrein in large dhows and being transshipped from Bahrein to Arabia in shallow-draft *jalbhuts* (see Plate 17—top). In 1939 Kuwait had 106 ocean-going *bhums* on the registry.[4] However, the majority of the Kuwait deepwater *bhums* sail to India, rather than to Africa, carrying dates from Basra. The mariners of Kuwait probably reached their present maritime status a little over a century ago. Palgrave traveled in the Persian Gulf in 1862-1863 and was much impressed with the maritime activity of Kuwait:

> Among all the seamen who ply the Persian Gulf, the mariners of [Kuwait] hold the first rank in daring, in skill, and in solid trustworthiness of character. Fifty years since their harbour with its little town . . . was a mere nothing; now it is the most active and the most important port of the northerly Gulf.[5]

[3] R. Mookerji, *Indian Shipping* (Bombay: Longmans, Green and Co., 1912), p. 19.

[4] A. Villiers, 'The Arab Dhow Trade,' *Middle East Journal*, II (1948), 399.

[5] W. G. Palgrave, *A Year's Journey Through Central and Eastern Arabia (1862-63)* (3rd ed., London: Macmillan and Co., 1866), II, 386.

228 361 505 However, a century before this, Kuwait was apparently noted more for its pearl fisheries (which are still important) than for its maritime trade, as Niebuhr related that in 1763

> Kuwait is a sea-port town. . . . The inhabitants live by the fishery of pearls and of fishes. They are said to employ in this species of naval industry more than 800 boats. In the favorable season of the year, this town is left almost desolate, everybody going out either to the fishing, or upon some trading adventure.[6]

In Niebuhr's time, in the eighteenth century, the Omani sailors from Muscat and Sur on the Gulf of Oman were the famed Arab mariners, for Niebuhr related that

> The inhabitants of Oman, although not fond of sea-fights, are nevertheless the best mariners in all Arabia. They have several good harbours, and employ many small vessels in the navigation between Jidda and Basra. To this last town there come annually fifty such vessels.[7]

In the middle of the last century Muscat was still an important maritime port, for in 1854 Osgood related that

> Several ports in the Persian Gulf are tributary to it, and some excellent ships and a large number of [*baghlas*] employed in coasting and foreign trade, are owned by the Banian merchants at Muscat. In fact more than half of the trade of the Persian Gulf is carried on in ships owned at Muscat. . . . The trade with America, which is carried on chiefly by vessels from Salem does not exceed thirty-five or forty thousand dollars annually. Dates and cash are usually taken in exchange for American merchandize.[8]

[439]

In the present day Muscat has completely fallen from its former prized position and given way to Kuwait and Bahrein Island in the Persian Gulf. However, the port of Sur in Oman still carries on the maritime tradition of the Omanis and maintains a considerable fleet of dhows which have long been prominent in the trading along the African coast.

501 The craft that make the trip down the African coast from Arabia are by no means all large ocean-going vessels; craft of all sizes and descriptions come into Zanzibar. Villiers[9] tells of seeing a 30-foot *jalbhut* from Oman sailing down the African coast. Having owned and sailed a *jalbhut* of about the same size in the relatively calm Persian Gulf waters, I have nothing but the utmost respect for anyone with the nerve to sail such a small open boat several thousand miles in the potentially rougher Indian Ocean.

113

[6] C. Niebuhr, *Travels Through Arabia* (Edinburgh: R. Morison and Son, 1792), II, 127.
[7] Ibid., 122.
[8] Osgood, *Notes of Travel* (Salem, 1854), p. 81.
[9] A. Villiers, *SS*, p. 190.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

Estimate of the size of the dhow fleet sailing down the African coast is difficult, as the Arab goes to extremes to evade official statistics. The Mombasa port statistics for 1937 showed 1,427 dhows entering the port.[10] Not all the ships sailing to Zanzibar put into Mombasa, which is only a day's sail from Zanzibar. It must also be remembered that a certain percentage of the figure represents Mombasa dhows and dhows of neighboring ports on local coastal trading ventures. In Aden some two thousand dhows trade in and out of the port every year. However, a large proportion of this figure represents Adenese dhows and neighboring dhows that do most of the cargo carrying to the small ports in the southern Red Sea and the Gulf of Aden; only a small percentage of this figure represents dhows passing through Aden on their way to Africa. Thus it would seem that the total number of craft sailing down the East African coast may well range over a thousand, depending upon economic conditions. Only a small portion of these are Indian craft, for Vaidya[11] estimates that about seventy-five Indian vessels of from one hundred to two hundred tons are engaged in the traffic to Africa, mostly from the Gulf of Cutch.

The Indian Ocean dhow trade is definitely a seasonal venture, as the ships usually depend on the monsoons to carry them on fair winds to their destinations. Vessels from the Persian Gulf and from India make one round trip a season when traveling south to East Africa. Arab and Persian ships start leaving the Persian Gulf in August and September with the first date crops and return in May and June, averaging eight to ten months for the round trip. Indian ships making the Africa run leave in November and return by June, averaging about six months for the round trip. The Indians have less time in which to make the trip because of the violent storms on the west coast of India during the southwest monsoon, which makes sailing unwise during the months of June, July, August, and September.

When making the trip between the Persian Gulf and India it is customary for the Arabs, Persians, and Indians to make two round trips a season. The vessels leave at the same time as the ships going to Africa; that is, in August and September for Persian Gulf ships, and in November for Indian ships. Because of the monsoon storms, the Indians have to be home by June, while the Arabs only have to be out of Indian waters by June. Actually, Arab ships start arriving in November and are ready to leave India after their second trip in March or April. These trips be-

[10] A. Villiers, 'The Arab Dhow Trade,' *Middle East Journal*, II (1948), 413.

[11] K. B. Vaidya, *Sailing Vessel Traffic on the West Coast of India* (Bombay: Popular Book Depot, 1945), p. 57. I am indebted to Mr. Alexander Crosby Brown for calling this most valuable work to my attention.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

505 132

tween the Gulf and India usually average about three months a round trip.

The effect of the southwest monsoon in India is felt most in the southern part of India. In April the northeast winds change gradually to the southwest; the monsoon breaks in force on Ceylon in the third week in May and moves up the coast, hitting Bombay about the first week in June, and finally reaching Karachi about the last of June.

Along the Malabar coast it is not unusual for 150 inches of rain to fall in four months from May into September. However, farther north on the Sind coast there is only about twenty-five inches of rain during the whole southwest monsoon. Thus on the Malabar coast there is no coastal trade carried on from May through September. During a storm in May 1943 over two hundred vessels were sunk on the Malabar coast and more wrecked.[12] However, on the northern Sind coast of India native shipping is closed down only during June and July, so that there is a ten-month shipping season possible there, as compared to seven months on the Malabar coast. The west coast of India gets about a month more of the southwest monsoon than the western part of the Indian Ocean, where the northeast winds start about October. The northeast monsoon usually brings fair weather with little rain to the west coast of India. Away from the coast of India the southwest monsoon is a fair weather trade wind blowing up from Africa.

There are numerous Indian firms that will insure cargoes carried on Indian coastal sailing craft; the insurance rates give a vivid picture of the relative danger at sea during the various periods of the two monsoons:[13]

Season	*Month*	*Rate*
Change	November	1½%
Northeast Monsoon	December-January	1%
	February	1¼%
	March	1½-1¾%
Change	April	2½-6%
Southwest Monsoon	May	6-10%
	June-July-August	No insurance
	September	2½%
	October	1½%

This shows very graphically why Arab ships stay out of southern Indian

[12] Ibid., p. 16.

[13] Ibid., p. 156. These rates are average rates for the southern part of the coast, and of course would change for the northern part of the coast where the southwest monsoon does not set in until June.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

waters from May to September, and why most local Indian craft are drawn up on the beaches.

II

Dates are probably as important a factor as the monsoons in maintaining the large lateen fleet in the waters of the Indian Ocean. By a lucky coincidence, the great date crop of Iraq begins to ripen just before the northeast monsoon sets in about October. The great maritime expansion of the port of Kuwait has probably been due in no small part to its proximity to Basra, the port through which most of Iraq's dates go.

Dhows come to Basra for dates from Kuwait, Bahrein, Persia, Oman, India, and even as far away as the Hadhramaut. Starting in the latter part of August and continuing into September, Kuwait deepwater ships are floated from the beaches, where they have rested for several months during the summer, making ready for the run to Basra to pick up dates. The farther the home port is from Basra, the earlier the ships must depart, so that craft from the Hadhramaut must allow a month or more to get to Basra, riding up to the Gulf of Oman on the summer monsoon and then working their way up the Persian Gulf, where the monsoon is not felt.

Almost without exception the date cargo is carried out of Basra on consignment for some merchant; sometimes the destination is known on leaving Basra, but often the consignment is sent to Aden or Mukalla (see Plate 23—bottom) in South Arabia for final shipping instructions from the Arab or Indian export firm shipping the dates. Dates are usually not carried into the Red Sea much past Hodeida in the Yemen in Kuwait ships, although Villiers[14] tells of a Kuwait *bhum* transporting a load of dates as far as Qizan in Saudi Arabia.

In such a manner dates have been leaving Iraq for decades bound for the southern shores—that is until the winter of 1949. In that winter, for the first time in many years, the great date-bearing Kuwait *bhum* fleet failed to appear in its usual strength in the waters along the southern shores of Arabia; only a portion of the usual quota appeared in Aden by the first of 1950. The dates that would ordinarily have come into Aden in Kuwait dhows came down unceremoniously under steam. What caused this abrupt change in the well-established status quo of the dhow trade? The same thing that has wrought so many other radical changes in the economy of the Middle East lately—oil!

Kuwait is actually a city-state with few industries except pearling, fishing, and shipbuilding; there are no farms, no date plantations, and only

[14] A. Villiers, *55*, p. 366.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

361 a few scattered Bedouin tribes. The Kuwait Oil Company is now operat-
465 ing in high gear, and has apparently offered so many opportunities for natives that *nakhodas* (captains) have difficulty in getting men to sail their ships at the wages they can offer. Sailors never get any regular wages on a dhow, receiving a share of the earnings of the ship only after the voyage is over. Many sailors have apparently found that it is a comfortable feeling to receive a regular wage every week! It is too early yet to tell whether or not the change is permanent.

#39 There has also been a noticeable fall-off in date-bearing Arab dhows
505 sailing to India, but apparently for a different reason. Vaidya[18] states that during the 1943-1944 season, presumably for the first time, sixty to seventy per cent of the Arab fleet that usually brought dates failed to appear because of Arab restrictions on the export of wet dates and because of the high prevailing prices of the dates. Thus, this case is not allied to the present situation prevailing in Kuwait, as during the 1943-1944 season dates presumably were not shipped to India by any other means.

However, even if Kuwait is unable to put its *bhums* to sea, the date crop in the future will still probably be carried out of the Persian Gulf in dhows as usual; it will take time to attain a balance again. Whether the port of Sur rises to the challenge or whether some Persian port takes the trade remains to be seen. The Suris from Oman are logical successors to Kuwait, for in times past they have been noted for taking cargoes at lower rates than the Kuwaiti or any other mariners could afford to, and they have a long maritime history.

It is interesting to note that oil activities in other areas in the Persian Gulf have drastically affected the marine activities of other coastal towns. Over ten years ago, the Saudi Arabian ports of Jubail, Qatīf, and Darin used to send out over a hundred dhows yearly to join the Persian Gulf pearl fisheries. Now if they send out several dozen dhows it is news; the Arabs who used to dive for pearls now have steady jobs with the Arabian American Oil Company. The same has happened on Bahrein Island. The Bahrein *nakhodas* are no longer able to find a multitude of divers who will accept the wage the *nakhodas* are able to offer; thus the Bahrein pearl fleet is only a shadow of what it was a quarter of a century ago.

439 Most but not all Arab dhows load dates first; however, many Omani
226 dhows bring cargoes of dried fish and fish oil, for fishing is particularly good in the waters off Oman, and sharks and large tuna are caught in considerable amounts, both for home consumption and export. Sometimes, however, the Omanis may set out for Africa empty, or with only a partial

[18] K. B. Vaidya, op. cit., p. 207.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

cargo of fish if the local supply is not sufficient, and fish their way down the Arabian and African coast, selling fish wherever they can. Then they do the same thing on the way back. Mukalla is a favorite stopping place on the way down to Africa; I have seen dozens of *bedans* from Sur come into Mukalla and lay out their catch of shark or tuna on the beach to dry while they beached their dhows and put a coat of shark liver oil on their hulls (see Plate 18—top and bottom). Shark is a favorite Arab food; the flesh is cut off in strips or slabs and dried, while the liver is saved for its oil. The Arabs have little use for the tails or fins of the shark, but they are all meticulously saved and eventually find their way to China via India.

Thus these fish-bearing dhows from Oman start their trading venture from their home port, carrying a product of the port, and never carry other cargo; they trade fish from Sur to Zanzibar and back. For this trade they apparently always use the primitive *bedan*, usually ranging from fifty to sixty feet in length. The Suris export dates from Oman, or go to Basra for a cargo; when carrying dates they use large *sambuks* and *baghlas*.

In contrast to Arab and Persian ships which sail along the coasts the whole way, whether going to India or Africa, Indian vessels usually sail straight from India across the ocean for South Arabia or Africa with consignments of goods from Indian exporters at specific ports. Only rarely do they carry dates; their usual cargo consists of the products of India. From the Malabar coast they may carry coir rope stuffs, coir matting, teakwood, teak dugout canoes, coconuts, spices, cement, bricks, or tiles, while from Bombay they may pick up cotton piecegoods, groundnut oil, or tea. Most of the Indian ships that voyage to Arabia or Africa come from the Gulf of Cutch; few if any craft from Bombay or the Malabar coast carry this trade today.

In vivid contrast to the Arab date cargo and Indian cargo, which is usually on consignment, the replacement cargo for the rest of the voyage for the average Arab dhow is purchased by the *nakhoda* from the profit made on the date freight, for sale at the best market. After its date cargo has been discharged, the dhow becomes a trader in every connotation of the word, picking up and selling cargoes as she coasts south along the South Arabian and East African coast.

Sometimes the *nakhoda* may pick up a small cargo of partially spoiled dates to unload on the Africans; these the crew may wrap meticulously in fancy wrappers. At Aden the dhow may take on salt, sugar (from Java), rice (from Rangoon), canned goods, hardware, kerosene, or cotton goods and prints, and from the Hadhramaut coast the cargo may be dried shark

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

or other dried fish, *ghee* (clarified butter), honey, tobacco, grinding stones, and straw work (fans, mats, and baskets). It must be remembered that most of the cargo moving around the Middle Eastern waters in small vessels, whether dhows or small coastal steamers, is for the native trade and is destined for native bazaars, which are noted for the cheapness and poor quality of their wares. Once the dhow is loaded it is ready for the trip down the East African coast; however, the Arabs sometimes take a month or more to collect a full cargo.

Upon the *nakhoda* of the dhow rests the responsibility of getting another cargo for continuing down the African coast once the consigned date cargo is discharged. Invariably the *nakhoda* is the nominal owner of his dhow, so he acts as his own agent. As the cargo loaded after the dates are discharged is not on consignment, its selection is a matter of the *nakhoda's* judgment, with an eye to what will sell best in the African markets. However, a cargo that must be regarded as essentially on consignment is that of passengers. On some Africa-bound dhows passengers comprise a considerable portion of the cargo. The competition for passengers is very brisk, so that there is sometimes a race among the various *nakhodas*, who hasten to neighboring ports via motor launch as soon as their ships reach South Arabia to discharge their dates.

Through the dhows there is a constant flow of Arabs from South Arabia and Oman and of Indians from India. The immigrants usually become porters, hawkers, musicians, or beggars, but if they are very industrious, they may end up owning a small shop in the *suq*. Their usual aim in migrating is to work long enough so that they can go home after they save a little money; usually they never make enough to get out. Villiers[16] states that the Italian officials in Mogadiscio checked four thousand passengers on thirty-five dhows that were in the harbor when he was there in 1939. In 1937 the fare along the Hadhramaut coast between ports was three rupees.[17] In 1939 the fare from South Arabia to any African port was only eight rupees for men and twelve for women.[18] In Aden in 1950 the fare for natives traveling as deck passengers on A. Besse and Company dhows with no accommodations was 15 rupees to Berbera, Djibouti, and other ports about 150 miles from Aden; thirty rupees to Massaua, Mukalla, and ports about 450 miles away; and one hundred rupees to Jidda, Port Sudan, or ports approximately one thousand miles from Aden. These were fixed rates on the dhows operated by Besse; other dhows that

[16] A. Villiers, 'The Arab Dhow Trade,' *Middle East Journal*, II (1948), 404.
[17] F. Stark, *A Winter in Arabia* (New York: E. P. Dutton & Co., 1940), p. 313.
[18] A. Villiers, *SS*, p. 78.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

were trading down the coast could easily afford to undercut these rates.

As was mentioned above, women are usually charged higher rates for travel on dhows; this is because they have to be segregated and usually manage to make trouble, unintentional as it may be. Villiers[19] gives a graphic description of the nuisance a group of women can cause on an Arab dhow. For centuries women have apparently been creating disturbances on Arab dhows, for Niebuhr, who traveled down the Red Sea on a dhow in 1763, relates that

> In our passage, we found ourselves in danger of a worse misfortune than shipwreck. The females, who were lodged under us, more than once suffered linen, which they were drying, to catch fire, in consequence of which the vessel must have been burnt, if we had not been alarmed by their screams. . . . Those women were indeed extremely troublesome and indiscreet.[20]

Besides the ship's cargo, every member of the crew usually lays in a store of goods that he personally peddles. Each sailor is allowed a sea chest (see Plate 22—bottom), which he fills with print goods, turbans, flashlights, razors, sarongs, cigarettes, and perfumes which are later diluted. The *nakhoda* usually has some rugs or carved wooden chests to peddle (see Plate 17—bottom). Virtually none of this material enters Africa legally, but is for the most part smuggled in. Most of these trivial goods are carried in by the Arabs personally. Villiers[21] relates that he saw one man wear three gowns and eight sarongs, then wrap more sarongs around his knees, and make six trips through customs a day. Sometimes they are detected and stripped, but that is part of the risk. Often the Africans come out in canoes at night and remove the goods in small quantities. Frequently Arabs travel down the African coast on dhows as professional smugglers, living only for the smuggling they can accomplish. This sort of trading has been going on for centuries, for Paris[22] related that '. . . leur navires sont de vraies caravanes dans laquelles tous les matelots ont un intérêt.'

For the Arabs and the Persians, the trip down the African coast is leisurely and slow. It is not unusual for a dhow to stay in a port for three or four weeks haggling over a cargo, only to leave without having transacted any business. There is no rush, simply because there would be a long wait for the southwest monsoon to set in and carry them back north, if

[19] Ibid., p. 78 ff.

[20] C. Niebuhr, *Travels Through Arabia* (Edinburgh: R. Morison and Son, 1792), I, 219.

[21] A. Villiers, *SS*, p. 143.

[22] F. E. Paris, *Essai sur la Construction Navale des Peuples Extra-Européns* (Paris, Bertrand, [1841]), p. 9. '. . . their ships are true caravans in which every sailor has an interest.'

they completed their trip down the African coast to Zanzibar too quickly.

Once the trading voyage down the African coast to Zanzibar is completed, Arab and Persian craft usually load a cargo of mangrove poles for shipment back to Arabia, unless they have the rare luck of getting cargo on northern consignment. For centuries mangrove poles from Africa have been used in the construction of houses in Arabia, where there is an extreme shortage of wood of any kind. Indian dhows never load mangrove poles since there is an abundance of wood in India. Mangrove trees are plentiful along the East African coast in swamps at certain river mouths; most poles come from the Rufiji Delta, a little south of Zanzibar, and from Lamu, north of Zanzibar. The poles are cut by the dhow crews, with the aid of Swahili cutters recruited for the purpose.

Alan Villiers[33] spent a month in the Rufiji Delta with a Kuwait crew obtaining a cargo of mangrove poles and has given us a most vivid description of pole-gathering activities. In the Rufiji Delta the mangrove trees grow in the soft, muddy delta, so that the cutters must wade in mud and water all day long. The branches are stripped with small axes and the poles loaded into small dugout canoes and brought to collection points where they are graded and stamped by government inspectors. Frequent and sometimes constant rain and savage mosquitos make a pole-gathering trip in the Rufiji Delta a suffering hell!

The Arabs have to pay the firm holding the pole-concession on the swamp for the poles, but in true Arab fashion they manage to load considerably more poles than they pay for. There is a well-organized pole-stealing racket, with everyone in on it, from the cutters to checkers and inspectors, with the exception of the head government forestry inspector. As the prevailing market price for mangrove poles in Arabia is about the same as the list price in Africa, the Arabs could not make any profit if they did not manage to load some extra poles.

In addition to mangrove poles, the Arabs may load cocoanuts, cloves, cocoanut oil, soap, or vermicelli. A private venture of the crew for the return trip from Zanzibar may be in lemons. Around Zanzibar lemons can be bought by the canoe-load for several rupees. The crew can squeeze the lemons and bottle the juice in bottles they have acquired along the way, using a pinch of salt as a preservative. The juice is sold at a nice profit in northern ports, where it is diluted for making sherbet.

In making the trip home on the southwest monsoon the Arabs waste little time, for the sooner they can get back, the more time they have for other activities before it is time to ship out again. Dhows from Oman

[33] A. Villiers, 55, pp. 237-261.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK?

usually try to sell their mangrove poles along the South Arabian coast. 439
If they do not sell their poles by the time they get to Oman, they simply put them on the beach and wait until next season. Knowing that the Omanis flood South Arabian ports with poles, the Bahreinis, Kuwaitis, and Persians sail straight for the Persian Gulf and its more profitable markets. Likewise, the Omanis, realizing that the Persian Gulf markets are flooded in the early summer, wait until late summer if they have to sell their poles in the Persian Gulf. Sometimes dhows from Oman carry firewood or fish oil in addition to mangrove poles if they go north to Basra for dates.

If a vessel sells its cargo of mangrove poles a considerable distance from her home port, it may load coral rock as ballast if it is available; this may be sold in Kuwait and ports in eastern Arabia. The coral rock 316?
is pried off the sea bottom and is a common commodity for construction purposes in a land where building rock is almost as scarce as wood on the sterile sandy coast.

As we have seen above, Persian and Arab ships make two trips to India during a season, usually carrying dates on consignment, but sometimes they carry dried fish, dried fruit, palm leaf mats, and coffee from the Persian Gulf and Arabia. After they have unloaded, they pick up a cargo of the products of India for sale in their native waters. These products consist mainly of teakwood timber, teak dugout canoes, coir roping stuff, coir matting, bamboo, cotton-goods, cocoanuts, chests, chairs, spices, and tea. Cement and tiles are occasionally loaded, but bricks (a very common product of the Malabar coast) are rarely loaded, as they are manufactured in Iraq and shipped out of Basra. Virtually all the teakwood for dhow construction comes from India, and Indian teak dugout canoes have been spread up and down the shores of the Indian Ocean, the Persian Gulf, and the Red Sea by dhows.

The *Periplus of the Erythraean Sea* tells of ships coasting on the African coast and trading cargoes as they went two thousand years ago. But cargoes have changed considerably from those ancient times when alabaster, myrrh, and frankincense were exported from South Arabia and tortoise shell, hippopotamus teeth, cinnamon, and slaves were exported from East Africa.

By 1800, slaves had become the chief cargo out of East Africa, with 567
Zanzibar as the center; however, with European intrusion into the waters of the Indian Ocean, eventually the British more or less successfully stopped the slave trade, which was in large part carried on by the Omanis. It has been estimated that by 1873 there were thirty thousand slaves ex-

567 ported annually from East Africa to the Persian Gulf and Arabia.[24] The term 'human cargo' is no exaggeration, for slaves were packed in the holds of dhows with an eye only towards maximum capacity. There is an old sketch of a small dhow loaded with 156 slaves (men, women, and children) packed into the hold, on the bottom and on two bamboo decks above with only three feet clearance between decks (see Figure 3).[25]

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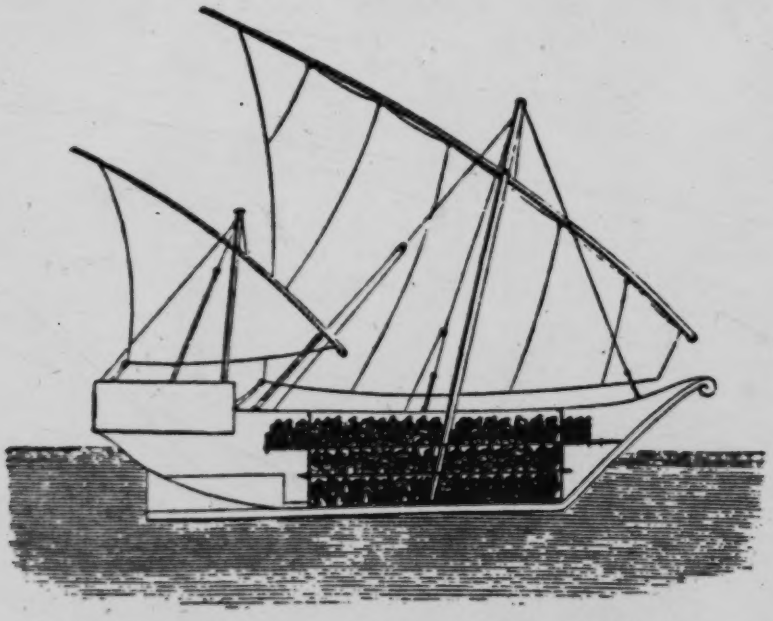

Fig. 3. Slaves packed into the hold of a small dhow, on the bottom and on two bamboo decks, with only three feet of clearance

527 Today slave-running carries such high penalties that no Arab would attempt it with a hold full of slaves on a long voyage to the Persian Gulf. However, the slave trade still operates on a reduced scale in the Red Sea between Africa and Arabia, usually utilizing fast *zarooks* and carrying only a small number of slaves. The trade is still active, mainly because both slavery and white slavery still flourish in Saudi Arabia and Yemen. These two countries signed neither of the two world conventions: the one in 1921 forbidding traffic in women and children and the one in 1933

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[24] Anonymous, 'Vessels Used in the Zanzibar Slave Trade,' *The Illustrated London News*, LXII (March, 1873), 208-209.

[25] Ibid.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

forbidding traffic in adult women;[26] in 1948 these same two countries failed to file reports on efforts to suppress traffic in women, children, and obscene publications.[27]

Slaving is difficult to stamp out, as the African victims are led to believe that their social status will be bettered. Actually, there is some truth in this, for an African, even as a slave, has a far better life in Arabia, since the Arabs treat their slaves fairly.

British regulations at Zanzibar provide that dhows must carry crew members voluntarily signed on and not in excess of that needed to sail the ship.[28] At Mombasa, *British Regulations for Native Vessels* provides that no man may be signed on as a seaman without satisfying the officials that he has voluntarily shipped, and further that no passengers are to be shipped without the knowledge of the authorities.[29] However, Villiers[30] relates that an Omani *sambuk* intentionally ran down a fishing canoe off Africa and 'saved' two Africans to be sold later as slaves in Arabia.

In essentially the same category as the slave is any other illegal or illicit trade. During World War I gun-running was at a high, but now the trade is not very prosperous. There is considerable cargo smuggled to avoid duties; tea and other goods are run to Persia by the Arabs on the Trucial Coast of Oman—the old Pirate Coast.

The customs and immigration officials in Africa do not have much use for the Arab deepwaterman, with his Arab passengers and smuggling crew. On the other hand, the Arab takes delight in deception, and attempts to confuse the European as much as possible. No large dhow ever carries a visible name; its papers usually contain an official name, but more often the dhow is known by the name of the *nakhoda*, who is usually the nominal owner.

As soon as an Arab dhow reaches an African port, the local officials try to get a passenger and crew list; in this they never succeed, as certain of the passengers always vanish into the native anchorage as soon as the anchor is down, to return after the survey is made. This is easy, as all the native craft are herded into a separated anchorage and often new arrivals have to drive into small spaces in the middle of the anchorage.

Few carry passports or other identification, so actual identification is

[26] J. L. Carver, 'Slavery's Last Stronghold,' *United Nations World*, II, No. 5 (June, 1948), 24-27.

[27] However, in all fairness it should be pointed out that the USSR, Afghanistan, Byelorussia, Honduras, Iceland, and Norway also failed to make reports on the grounds that the problem has not arisen in their countries.

[28] A. Villiers, *SS*, p. 212.

[29] Ibid., p. 190.

[30] Ibid.

486 difficult, if not impossible. When shipping out of a port, an Arab simply gets approval from the port police and moves his chest aboard. However, in Africa some ports will not allow passengers to discharge; to get around this, the Arab *nakhoda* sometimes obtains permission for shore leave for some of his passengers, and brings back a different group, who want to leave. Sometimes as much as twenty per cent of a passenger list of several hundred may be shifted in a port, but the dhow still leaves with a full complement, so everyone is happy.

Regulations are a challenge to the Arab, although some of his disregard for regulations may be classed as nothing less than pure thievery. Villiers[21] relates how a Persian dhow managed to load two hundred tons of salt stolen from the Italians at Haifun in 1939. The salt was successfully loaded at night from small canoes, but the dhow was apprehended just as it was ready to sail, and the *nakhoda* was thrown into jail.

III

502 Arab navigation, on the run from Arabia down the African coast or
487 over to India, is little more than dead reckoning, and a poor brand at that. The only instrument the large Arab craft carries is a compass, which is assumed to give a true reading. Most Arabs have never heard of compass deviation and will not believe that a compass can give anything but a true reading. Besides a compass, the deep sea dhows sometimes carry a chart, which may be of surprisingly recent origin or of surprisingly ancient origin; Villiers[22] tells of once seeing an Arab pilot armed with a chart of the Indian Ocean corrected to 1746! A few Arabs carry Isa Kitamis' *Directory of Eastern Seas* in Arabic, which contains many useful descriptions of the landmarks which may be encountered.

However, as the Arab navigates, a 1746 chart and a faulty compass are ample for his needs, for he simply coasts along, usually in sight of land. Going down to Africa, he sails before the wind with land to starboard; returning he sails before the wind with land to port. The seas that he sails are like a book to him, and he seldom needs his chart; this is possible, as there are no reefs along the African way. When going to India the Arab proceeds in the same manner, coasting along. In going to Africa, the Arab may get out of sight of land while crossing the Gulf of Aden, but it is only a matter of a day or so, as the land is mountainous and high on both sides of the Gulf. In sailing the waters of the Persian Gulf, the dhow

[21] Ibid., p. 112.
[22] Ibid., p. 149.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

is often out of sight of land, at least on the Arabian side, as the Arabian side is treacherous and the coast low and sterile.

A dhow sailing from the Persian Gulf to Africa or to India does not actually go at all out of the way by coasting, as a glance at a map will show. This practice of coasting has the added advantage of keeping the dhow within easy rowing distance of land in case the ship should go down, a possibility never overlooked.

In contrast to the Arabs and the Persians, the Indians still navigate their dhows over open ocean from India. However, a glance at the map will show the reason—craft from India would have to go far out of their way to coast to Africa in sight of land. Thus by necessity the Indians have maintained the knowledge of navigation that the Arabs and Persians had mastered so successfully in medieval times; being able to get along successfully by coasting their deepwater craft, the Arabs and Persians have lost the navigational knowledge which in medieval times brought them in contact with junks from China in the waters farther east. When the Arab has to sail a navigated course, he usually, though somewhat reluctantly, gets an Indian navigator. It is interesting to note that the ancient mariners in Greek and Roman times successfully navigated the southern route to India using only the sun and the stars; the mariners' compass was not invented until the Middle Ages.

There is one other alleged aid to navigation in the Indian Ocean that was known to the ancients. Niebuhr traveled from Arabia to India via dhow in 1763 and related that

> The passage between Arabia and India was formerly thought very dangerous. Ships were carried on by so rapid a current, that they could neither keep their reckoning, nor distinguish the coast during the rainy season: several were consequently lost on the low coasts of Malabar. These misfortunes have ceased to take place, since an observation was made, which has been thought new, although Arrian speaks of it being known to the ancients; in the Indian Ocean, at a certain distance from the land, a great many water serpents, from 12 to 15 inches in length, are to be seen rising above the surface of the water. When these serpents are seen, they are an indication that the coast is exactly two degrees distant. . . . We saw some of these serpents, for the first time, on the evening of the 9th of September; on the 11th we landed in the harbour of Bombay.[33]

On the run down to Africa the Arabs sail by night as well as by day; at night they make sure they are well out at sea and set a safe course by the compass. With its many reefs the Red Sea is an exception, for even local craft with a knowledge of the way anchor by night and sail by day

[33] C. Niebuhr, *Travels Through Arabia* (Edinburgh: R. Morison and Son, 1792), II, 373.

whenever they are near reefs. An exception to this is the slave-runner dashing from Africa to Arabia, for his activities are best carried on under cover of darkness. The reefs in the Red Sea are the main reason why foreign dhows do not venture very far into its waters.

In the field of navigation the Arabs are little impressed with Vasco da Gama's voyage, so famous in the West.[84] The Arabs take all the credit themselves; they claim that da Gama forced an Arab pilot to show him the way to India. Arab legend relates that an Ibn Majid, a famous pilot from the Persian Gulf, was delivered to da Gama by the Sheikh of Malindi (in present-day Kenya) as a hostage for stopping the siege of the town; the Arabs immortalize this Persian Gulf pilot and associate da Gama only with European intrusion into their territories.

The Arab dhow is actually not a very seaworthy craft (see Plate 19—top). It manages very successfully in fair weather, but in any kind of rough weather the dhow is likely to get into trouble fast. The *baghla* is apparently considerably less seaworthy than the *bhum*, as even Arab passengers (who are not particularly well informed about anything) prefer to travel in *bhums*.[85] Apparently the great transom stern of the *baghla* tends to make the craft unmanageable in heavy seas.

In the African port of Mombasa a Casualty Book listing all dhow casualties in the vicinity of the port shows that, while there were frequent accidents with small craft and less with larger craft, there was little loss of life.[86] This stems from the Arab's method of coasting close enough to land so that he can row ashore. However, no records list the number of dhows that have gone down with complete loss of life.

If the dhow springs a leak, it may often be disastrous. On a heavily-laden dhow the crew cannot get at the leak to repair it, and not having any pumps they do not even have time to start bailing. If they can get at it, the Arabs have been known to stop a leak where a plank was stove in by filling a cloth with rice, tying a string around the gathered neck and stuffing it in the hole; when the rice expands it fills the hole tightly.

Villiers[87] relates that a 178-ton Indian dhow loaded with mats sprang a leak and sank off Africa because the cargo prevented anyone from getting at the leak. The crew took fifteen minutes to clear the dhow, and very soon afterwards the sea was over her decks. The early English traveler Palgrave[88] had the same thing happen to him in 1863—an event which

[84] A. Villiers, *SS*, p. 197.
[85] Ibid., p. 106.
[86] Ibid., pp. 191-194.
[87] Ibid., p. 193.
[88] W. G. Palgrave, *Central and Eastern Arabia* (3rd ed., London: Macmillan and Co., 1866), II, 342 ff.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

nearly put an end to his traveling. While sailing in a *baghla* Palgrave was caught in a hurricane just off Muscat; the dhow lay to and drifted. As the storm set in with violence the dhow sprang a leak and in a matter of minutes settled into the sea. After a night in a small boat, Palgrave and eight others (ten men were lost) reached a beach in Oman. Ten other dhows, part Persian and part Omani, also went down off Muscat in this storm with complete loss of life on three of the craft.

A heavily-laden dhow hull-down in the water is extremely vulnerable to rain storms and squalls, even if she does not spring a leak. If such a dhow is caught in a deluge of rain, it may go down very quickly, for without any pumps there is hardly time even to start to hand-bail from the small well. The smaller open-waisted boats and the decked ocean sailers catch all rain, and if enough rain comes down fast enough, the craft simply goes down. Villiers[29] relates how a huge new 500-ton *bhum* sailed out of India on its maiden voyage with a cargo of coir. Caught in a rain squall the first night, the dhow filled with water and scuttled. However, in this instance, the rain apparently swelled the coir, which in turn split the hull. Most dhows lash palm mats amidship to extend the gunwales, whether they are open-waisted or decked; however, this is not very effective in rough weather.

In heavy winds it is customary for the dhow to split a seam or two in its great driving mainsail. However, the sailors will tell you that weak seams have their virtues and act as a safety device to protect both the sail-cloth and the mast from serious damage in sudden blows. In very rough weather the dhow sailor douses his sail and simply allows the craft to drift, without using any steadying sails or sea anchors. Usually they are caught in water too deep for their anchor lines and feel that drifting is the safest way.

The dhow is never prepared for any emergency at sea—it copes with it as best it can when the occasion arises. The dhow never carries any life preservers, life jackets, flares, or any other safety devices. The exception to this is the many Indian deepwatermen which sport life preservers on the stern. If a man falls overboard, Arabs head the dhow up and pull him aboard after he swims to the dhow; if the currents are too strong, they lower the longboat. However, the longboat is never ready to be lowered, as there are usually no davits on a dhow, the longboat being carried on deck; thus to lower it takes considerable time. Nothing is ever secured on board a dhow, on deck or below, and in rough weather the Arab waits until something goes scudding across the deck before he fastens it down;

[29] A. Villiers, *SS*, p. 365.

sometimes it is too late, for it may have already gone overboard. The Arab usually has no lines ready when he comes into a mooring and he may just as often throw a loose anchor over as not.

Dhows never show lights of any kind at night, whether under way or anchored. Although British regulations have forced many dhows from various ports on the Indian Ocean to carry lights, there is unfortunately no way of forcing the Arabs to use them. This undoubtedly results from centuries of travel in pirate-infested waters, where a light at night served only as a signal for sudden attack from pirates. There is only a weak light in the binnacle with which to see the course; everything else is dark. Not even when in the sea lanes off South Arabia, in the Persian Gulf, or in the Red Sea, where freighters and tankers beat a constant path, does the dhow show a light. In case of collision at night, the boat that can prove that it showed lights has a legal edge.

At the West Pier at Ras Tanura on the Persian Gulf, there is often considerable movement of Arab dhows and Arab *lanchs* (kerosene-driven native launches). Dhows slip in and out of their mooring like shadows on nights so black that a dirty white sail could not be seen ten feet away. One night a *lanch*, all of which carry lights, hit a rock-laden dhow amidship and in a matter of seconds sent her to the bottom in forty feet of water. Native divers unloaded her, and she was eventually salvaged. Since then, dhows make a frantic attempt to fan their coffee fires up to a bright glow when they see any *lanch* lights approaching, but they still do not carry standard lights. It is an eerie sight to see the glow of a charcoal fire suddenly light up a large lateen sail directly in your path!

When sailing along their own coasts, the Arabs like to sail in two's and three's. This arises from the fact that piracy is by no means a thing of the past. For centuries piracy and robbery were honorable professions among many tribes along the long Arabian littoral; such a reputation did the piratical Omani have during the last half of the last century that the very sight of their characteristic *bedans* and *batils* brought actual fear to the population of Zanzibar.[40] Niebuhr noted dangerous conditions in the Red Sea two centuries ago:

> Although from pirates properly so called, there is little to be feared in the Arabic gulfh [Red Sea], yet, so unskilled are the mariners in these latitudes, that they dare not venture to any distance from the coasts. This timorous mode of sailing might expose a single vessel to the robbery of the Arabs; to avoid which, these ships sail in little fleets; four always setting out together, that they may join to defend themselves.[41]

[40] G. L. Sulivan, *Dhow Chasing* (London, 1873), p. 102.
[41] C. Niebuhr, *Travels Through Arabia* (Edinburgh: R. Morison and Son, 1792), I, 212.

It was in the Red Sea that an American ship was plundered in the early nineteenth century; however, the pirates came from the South Arabian coast. This has been described by Osgood:

> Conspicuous among the former rulers of Dhafar was Seyed Mohammad Akil, who . . . was led by ambition and avarice to turn pirate. Among other prizes, in June 1806, he captured, plundered, and burned near the harbor of Hodeida, in the Red Sea, the American ship *Essex*, belonging to Salem, and commanded by Joseph Orne. Captain Orne had arrived in the *Essex* at Mocha with sixty thousand dollars to purchase coffee. He was persuaded to sail from Mocha for Hodeida by Mohammad Akil, who, keeping him company in an armed ship, seized the vessel soon after leaving Mocha, and slaughtered all on board except a Dutch boy named John Herman Poll, whom he carried to Dhafar. The young man was kept in servitude, educated as a Mahometan, married and had several children, and when last visited, within a few years, seemed perfectly contented with his lot, having nearly forgotten his mother tongue.[42]

While the Red Sea is now perfectly safe from such attacks, many areas of the long Arabian littoral in the Arabian Sea and the Persian Gulf are definitely not. O'Shea[43] relates that in the Persian Gulf as late as 1944 a large Arab dhow bound for the Trucial Coast of Oman with foodstuffs was attacked by a Persian dhow and the whole Arab crew murdered. Representations were made to the Iran government by the Political Agent of Trucial Oman; the pirates were supposedly apprehended and hanged by the Iran government.

Around the Kuria Muria Islands off the South Arabian coast, the coastal tribes are very piratical. Villiers[44] relates that in recent times the tribes on the Arabian coast near these islands have been known to seize ships at night, plunder the cargo, burn the ship and sell the crew in the interior. They have also been known to cut moorings at night, thereby allowing the ship to drift onto the rocks; then they salvage the cargo. This is apparently nothing new, for when Bent sailed along these coasts in the late 1890's, he noted the extreme suspicion of dhow sailors for the inhabitants of the coast:

> While at anchor we heard shouts and cries to come to land, but our sailors would do nothing of the sort. They said a single man might often be seen calling that he was wrecked, and asking to be fetched away, but a party of armed men would be behind a rock, and come out and murder the benevolent crew and steal the boat.[45]

[42] Osgood, *Notes of Travel* (Salem, 1854), pp. 119-120.
[43] R. O'Shea, *The Sand Kings of Oman* (London: Methuen and Company, 1947), p. 116.
[44] A. Villiers, *SS*, pp. 292-293.
[45] T. Bent, *Southern Arabia* (London: Smith Elder and Co., 1900), p. 279.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

721 Parts of this coast are as dangerous for Europeans as for Arabs, and in
619 some instances more so for Europeans. Even as late as December 1949 on the supposedly peaceful coast of the Aden Protectorate an act of violence occurred against a British-owned yacht. I talked to the survivors several months later in Mukalla. They related how the 110-foot motor launch *Anne Loretta* with an Englishman, his wife, and one Arab crewman was cruising a little off shore when she touched a sand bar. The captain went ashore to lay out a stern anchor and was seized by the Arabs of the local Ardiab tribe on the coast; then his wife and the Arab went ashore to see what had happened and were likewise seized. Several British officials to whom I talked admitted that these two English people came very close to death in the hands of these unpacified coastal inhabitants. The British explanation was that the area was between the Eastern and Western Aden Protectorates where the tribes had not been pacified, and the yacht should never have landed there.

IV

505 Every Arab dhow of ocean-going tonnage has a captain *(nakhoda)*, a mate, three quartermasters (or helmsmen), a boatswain, and perhaps a boatswain's mate in addition to the crew. The total complement on a 100-ton ship may be from twenty to twenty-five men, while on a 200-ton ship there will be from thirty-five to forty men. The small coasters of up to 50 tons have crews up to eight or ten; there are no officials on these
[291] small craft outside of the *nakhoda*. There is no formal dress on a dhow; often it is difficult to tell the *nakhoda* from the crew, as everyone usually wears simply a loin cloth or the long Arab gown and a head cloth.

A *nakhoda* is much more than the word 'captain' implies; he acts as navigator, pilot, shipwright, sailmaker, ropemaker, agent for buying and selling cargo, agent for freight, agent for recruiting passengers, cashier, bookkeeper, judge, and arbitrator. So completely does the *nakhoda* handle the ship and the ship's affairs that the mate has little to do when the *nakhoda* is aboard. Only when the *nakhoda* leaves the ship does the mate take over; that is the mate's only excuse for existence.

505 Many of the Kuwait ships on the run to Africa carry carpenters aboard
396 —not as ship's carpenters, but for the construction of small dhows for sale in African waters. Presumably they can sell them profitably in Africa at a price cheaper than the local boatbuilders! However, a small 10-ton dhow that was built aboard the Kuwait *bhum* on which Villiers sailed down the African coast, had to be left on the beach at Zanzibar in charge of a ship's agent, because the dhow could not be sold at the price de-

manded.[44] Few dhows carry ship's carpenters; they hire a carpenter when they need one.

The actual duties of a dhow crew may often begin weeks or months before the voyage starts. If the dhow is new, the first duties of the crew are to rig the ship and make the sails (see Plate 20—top). A boatbuilder furnishes only the hull with masts and yards; fitting out the ship is considered part of the work preliminary to making the voyage, and the sailors do not actually receive money for this preliminary work, as they are paid only when the voyage is over. If they actually need it, the *nakhoda* will give the sailors cash advances; these advances are later deducted from the sailor's share of the vessel's earnings at the end of the voyage. Thus the *nakhoda* fits out his ship at no cost to himself so far as labor goes—the crew actually furnishes it for nothing! Besides this the crew does all the stevedoring on any cargo the dhow may carry, also transporting the cargo in the longboat when required (see Plate 19—bottom).

Arab dhows keep no schedule and know little routine. At sea everyone, including the *nakhoda*, usually loses track of time. Friday, the Moslem day of rest, is not observed at sea, so the sailors work the month around and days come to mean nothing; it is easier not even to try to keep track of them. The only track of time the Arabs keep is the occurrence of Ramadhan, the month when the Moslems fast during the daylight hours. The Arabs know whether Ramadhan is before them or whether it has passed; if it is ahead of them, they keep a very rough idea of how far off it is.

When there is no work, the crew sleeps in a shady spot, if one is available—on the cargo or a pad. All hands turn out day and night for any work. It is not uncommon to see a dhow-load of sleeping sailors pass in broad daylight, but they can be on their feet in a second.

Watches are informal and virtually nonexistent on a dhow. Usually the *nakhoda* keeps watch during the day and the mate or a quartermaster or a boatswain keeps watch during the night. It usually turns out that the helmsman keeps watch, as he is the only man who has to keep awake! The carpenter on a Kuwait ship stands no watches and has few other duties outside of his boatbuilding.

There is a general working period of several hours for all hands every day, usually during the morning. The most essential duty is bailing; the foul bilge water is brought up from a small bailing-well in buckets, and is either dumped into a bailing-trough to flow overboard or dumped overboard via a fireman's bucket brigade. The decks are never washed down, as the water would drain below, through the leaky decks, rather than

[44] A. Villiers, *SS*, p. 268.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

overboard, and would have to be bailed out again. Other everyday duties may consist of ropemaking and sail-sewing (see Plate 20—bottom).

Before the sailing duties of the crew can be fully visualized, one must understand how a dhow is rigged. The ocean-going variety is invariably two-masted, although some of the smaller ocean-going craft, that should more properly be classed as coasters, have a single mast. Most large ocean-going dhows can raise a third mast far aft as a sort of jigger if they so desire; this mast and sail are usually borrowed from the longboat. These large dhows never carry this third mast as standard rigging; it is erected temporarily only when needed.

Usually when sailing before the wind large dhows carry only their great mainsails; there is little advantage in raising the smaller mizzen when sailing dead downwind with the mainsail up. However, when sailing downwind in a quartering wind, the mizzen is often raised in addition to the large mainsail. Many of the Indian and some Persian *baghlas* can send up a lateen topsail over the mainsail. Like the ornate carved stern of the *baghla*, which was presumably copied from European galleons, these topsails were probably also copied from the Europeans.[47] It is interesting to note that the *bhum*, which has risen to prominence as an ocean sailer in the last century, apparently never carries such a topsail.[48] The trend among the Arabs is to the least number of sails possible; the Arabs do not consider the setting of a topsail or a jiggermast and sail worth the effort, and few Arabs even carry a topsail.

When going to windward in light airs most large ocean-going dhows can set four sails: the lateen mainsail, the lateen mizzen, the lateen jigger, and a jib. The jib is rigged from the end of a light boom extended over the stemhead. With a big jib on, the jigger will help balance the canvas and ease the steering, but the Arabs still usually consider it too much trouble to set the jigger.

Thus, while some of the large ocean-going dhows have five different sails (main, mizzen, jigger, jib, and topsail) which they can set, they often carry only the mainsail. In adhering to their policy of a few big sails, rather than a number of small sails, the Arabs usually carry three different sizes of mainsails and two different sizes of mizzens. They adjust the size of the main to take care of the wind and try not to set any other sails. However, in light airs, they are often forced to set more canvas, but do it grudgingly.

The mainmast and yard on an ocean-going dhow are nothing less than

[47] R. LeB. Bowen, Jr., 'Arab Dhows of Eastern Arabia,' AMERICAN NEPTUNE, IX (1949), Plate 9.
[48] A. Villiers, *SS*, p. 277.

gigantic. The mainmast on a large two-masted dhow is about seventy-five per cent of the overall length of the craft; for a 150-ton dhow it is a massive tree trunk that will tower more than seventy-five feet above the deck and have a diameter of over two feet. The mast is not tapered much, being only slightly smaller at the top than at the bottom. The huge size is necessitated by the fact that, because of the way the Arabs sail, the mast must at times stand unsupported with the sail raised and working. The main yard is equally massive, attaining almost the overall length of the vessel but having a diameter only about one-half that of the mast. The yard is a tapered spar made of stout poles fished and lashed together. On a 150-ton dhow the main yard may weigh over three thousand pounds and the largest mainsail may weigh up to one thousand pounds. This four-thousand-odd pounds of teakwood and cloth is raised solely by manpower using a two-part, twofold purchase.

When the dhow is ready to sail, the longboat must be hoisted and stowed, and the anchors must be raised. In rough weather a large dhow may lay down four or more anchors, as the moorings are usually foul. The anchors are raised to the surface without any tackle, and then they may be brought aboard by a fall from the masthead.

Before the mainsail may be raised on an ocean-going dhow the huge sail must be bent to the massive yard by a series of robands along the whole head. After the sail is bent to the yard, it is secured lightly in stops, so that the yard may be hoisted with the sail neatly furled on it. After the yard is finally mastheaded and the halliards belayed, the sail may be released by a tug on the sheet, which breaks the sail out of the stops. The sheet acts as a rip cord and sends the sail billowing out like a parachute; if the breeze is light, the sail will flutter out like a flag, but if the breeze is fresh, the sail will open with a cannon-like roar. On smaller coastal dhows the sail is not gathered onto the yard in stops, the yard being simply raised with the sail in sailing position.

However, the yard and the sail are by no means raised as easily as one might gather from reading the preceding. As was pointed out above, the yard and sail on a 150-ton dhow may weigh over four thousand pounds and are hoisted by sheer manpower, using only a two-part, twofold purchase. Raising the yard and sail is a great occasion on any dhow, large or small—not by way of celebration, but because it represents so much work. There is a great ritual in hoisting the yard, the ritual becoming more important the larger the dhow. With the order to raise the yard, the sailors start a native song and dance; the pace quickens, and at an appointed place in the singing the sailors fall to the halliards. The halliards are at-

533 tacked almost savagely as the men chant praises to Allah and stamp the
535 deck as they shuffle by for another chance at the halliard. When the yard,
502 with the sail gathered in stops, is halfway up, the sailors may stop working and go into a dance, snapping their fingers and stamping the deck. On a large ocean-going dhow of 150 tons, it takes a whole hour to masthead the yard—about one-third of which is spent in dancing and singing. On a smaller dhow there is much less organization in raising the sail, but it is usually done faster with less song and dance.

502 Once the sail is raised and the dhow is under way, the sailors' duties are usually completed for a considerable length of time. However, if the weather changes, the sail may have to be changed. Once under way it may take several hours on a large dhow to lower one sail and replace it with a smaller (or larger) sail. The course may also have to be changed at times, regardless of weather changes. The Arab dhow tacks by wearing while sailing downwind; in wearing all hands have appointed stations, where stays, tacks, and sheets must be shifted.[49]

501 There is one more important duty carried out semiannually on the great ocean-going dhows running to and from Africa and India: that is cleaning the bottom. The bottom is usually cleaned and refinished before the dhow makes its return trip (from Africa or India) and after it has finished its seasonal trip. The dhow is moved into a shelving beach at high tide, and the ship is lightened as much as possible by the removal of any cargo and its yards, which are lowered overboard. The mainmast is lowered in its gear to the aft of the V-shaped trough in which it rests. Sometimes, depending on the dhow, it is necessary to completely unship the mast; at other times it is sufficient simply to lower it so that its resistance to the wind (and thus its toppling effect) is at a minimum. It should be remembered that the mast on a medium-sized ocean-going dhow is a massive teakwood spar weighing around five tons, while on a large dhow it may run well over ten tons.

When the dhow is lightened sufficiently, it is kedged into shallow water to the songs and chants of the crew laboring on the anchor lines. With the falling tide, mangrove pole props are lashed along the gunwales on each side so that as the tide leaves the vessel dry, it is propped up on stilts. With each successive tide change, the stilts must be carefully reset, as the vessel is partially refloated. To allow a large dhow to topple over is a serious matter, as it may have to lie there until a spring tide lifts it.

When the tide has receded sufficiently, the sailors set to work remov-

[49] For a description of 'wearing' see R. LeB. Bowen, Jr., 'Arab Dhows of Eastern Arabia,' AMERICAN NEPTUNE, IX (1949), 123-139.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

ing the old paying-stuff with scrapers. After this is removed they immediately start to put on the new compound, a mixture of tallow and lime, in thick layers with the flat of their hands. As soon as the task is finished, the dhow is kedged into deeper water, re-rigged, and is ready to sail. If no planks have to be replaced, this operation should not consume more than two or three days. A unique though rather incredible means of cleaning the bottom of an Arab dhow is recorded by Villiers,[10] who relates that, while becalmed off Oman, the sailors on the *bhum* on which he was sailing dived overboard, and scraped the sea growth off the ship's bottom while swimming slowly from side to side! The *bhum* in this instance was drawing thirteen feet of water.

All work on a large dhow is done by brute strength, and when the crew is working, the pace is very strenuous. All hands carry out orders day and night with the same fanatic vigor—it almost seems as though their lives depended upon the particular task they were doing at the moment. The *nakhoda* plays no favorites; when the tempo becomes too fast, those too old or feeble will drop out or be given a sea burial in a cover of palm fronds. Thus it is easy to understand why, when there is no work, all hands are to be found asleep. Thus have the dhows sailed for centuries on their unhurried voyages, and so they will probably continue for centuries. Of all the crews—Arab, Persian, and Indian—the Arabs from Kuwait attack their work with the most energy, almost fanatically.

At times the large deepwater dhows still have a pomp and ceremony about them that give them a dash of color never to be found in coastal dhows. Whenever coming into a large port that can supply the Arab sailor with the diverse entertainment that sailors of all lands expect after a long voyage, there is a great celebration. This consists of the dance so familiar among male Arabs throughout the Arab world—dull shuffling, agitating, jumping and hopping, accompanied by the loud noise of snapping fingers and moaning music from drums and tambourines. Sometimes the sailors get so wrapped-up in their dancing while entering a port that they are late in executing orders. Quite naturally, the longer a dhow has been at sea and the farther it is from its home port, the greater the celebration.

V

On even the largest Arab deepwatermen, the crew has no quarters, as there is no 'below'; all hands live on deck, finding the softest place they can. Usually the sailor's clothes—a nightshirt-like gown or a sarong and

[10] A. Villiers, *55*, p. 298.

a headdress—serve as his bedding. The Arab has not been spoiled by soft mattresses and can get a good night's rest on a floor, deck, or hard ground. The *nakhoda*, the mate, and a few selected passengers live on the poop. Sometimes an awning is spread over the poop to keep the burning sun out, and other times it is bare; sometimes a Persian rug is spread on the poop. There is invariably a cabin beneath the poop for the storage of valuable cargo and ship's stores (see Plate 22—top). This cabin is usually only the space between the continuation of the main deck and the poop deck. Sometimes there are doors leading forward, but more often it is simply open.

As there is no below on a dhow, there are quite naturally no toilets below. Dhows do carry toilets, however, in the form of one-holed privies, hung overboard off the poop (see Plate 21—bottom). They are usually on the port side, but are sometimes seen on the starboard; I once saw a large *sambuk* in Aden with two, one to port and one to starboard. These lack the privacy of a privy, and are almost completely open. Freya Stark[21] had to have the captain rig up a special awning for her when she traveled down the South Arabian coast in a dhow.

When the dhows carry passengers they are packed on the main deck like cattle. Living conditions are not too bad without passengers, but with a load of passengers, conditions immediately become foul. Ordinarily the bilge on a dhow is beyond description, but sanitary conditions become unimaginable with a load of passengers who are so packed in that they cannot all hang over the rail in rough weather. Villiers[22] tells of seeing a small 60-foot *bhum* from Oman sailing down the coast of Africa with about two hundred Omani passengers; it was estimated by the Arabs on Villiers' ship that ten of these would die before reaching Zanzibar. Whenever there is a death aboard, the Arabs conduct a hasty sea burial; deaths are never reported to port authorities by the Arabs, for fear of not being cleared.

Although the Arab aboard ship has little concept of time as far as days go, he divides the day into four periods separated by the announcement of the five daily prayers in which all good Moslems religiously indulge. Prayer time is announced by the *muezzin* (prayer caller), who may be any one of the crew or officers. The *muezzin* simply announces the time of prayer, and bears no similarity to a priest or minister, for the Moslems have none of these; their religion is voluntary. The first sound to fall on Arab ears every day is the raucous call of the *muezzin* perched on some

[21] F. Stark, *A Winter in Arabia* (New York: E. P. Dutton & Co., 1940), p. 314.
[22] A. Villiers, *SS*, p. 124.

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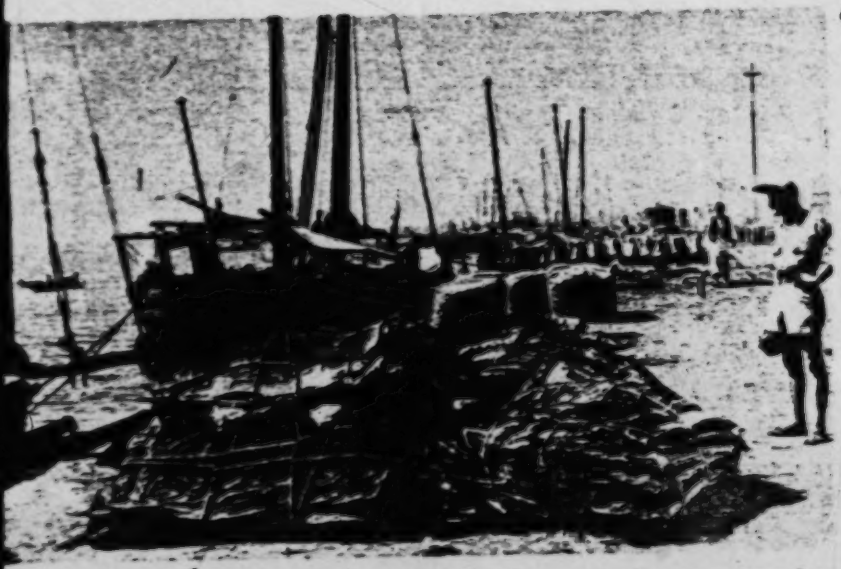
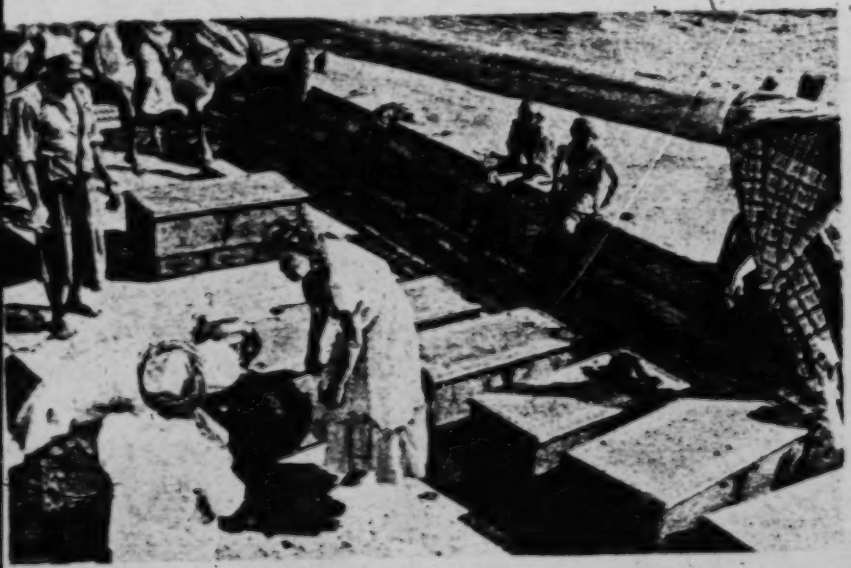


Manama wharf on Bahrein Island, through which comes the entrepôt trade destined mostly for transhipment to Arabia. Shown in the foreground are hides, and in the background bales of cotton and earthenware water jugs



Persian carpets and brass-bound chests are usually carried by the captain as a private venture. Here a Persian captain is attempting to sell some chests to an English woman in Aden

[facing p. 190A]

LATE 18

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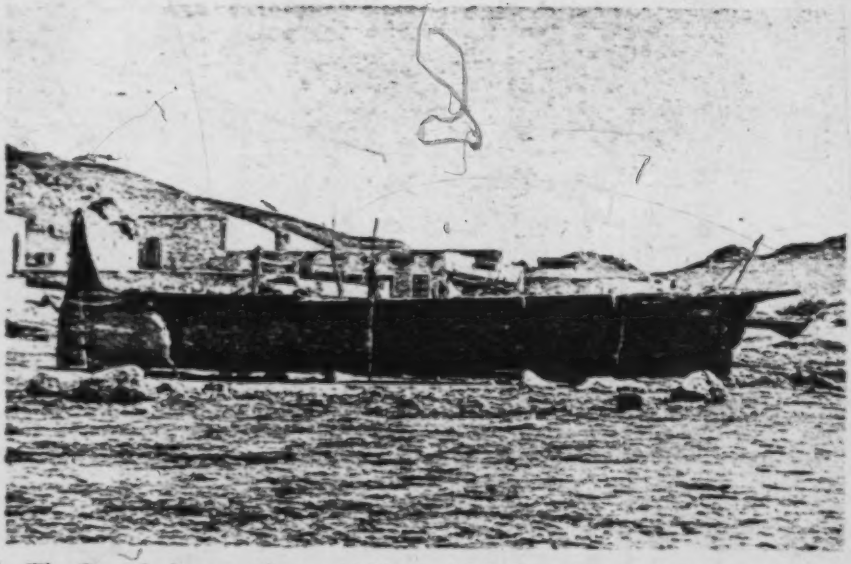
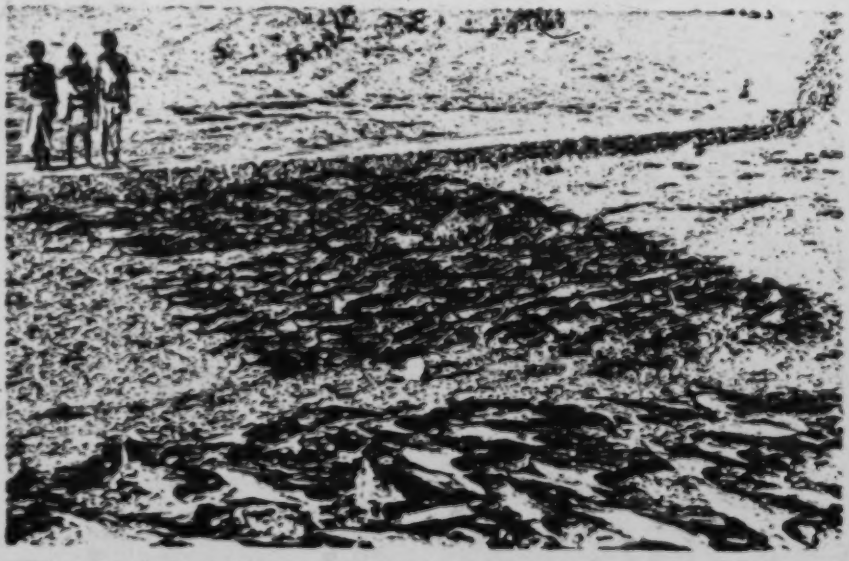


The Omani who coast down to Africa and fish along the way haul their *bedans* out periodically, lay the fish out to dry, and oil the hulls; this one is at Mukalla

251



Tuna fish drying in the sun at Mukalla. The Omani carry large quantities of dried fish down the South Arabian and East African coasts, coasting down on one monsoon and back on the other

[facing p. 190B]

4: Bowen C-5 (1960) 1961 MK2 Maritime Arabs MK2

point of vantage. Before every prayer the Arabs first perform the required Moslem ablutions of washing their hands, face, feet, etc., in sea water; then they go through the prayer ritual facing towards Mecca with their headcloth spread in front of them as a prayer rug. It is for determining the direction of Mecca that the compass on a large dhow is often most used! The first prayer is the dawn prayer said in the first greying light of dawn; the morning prayer takes place when the sun is close to the meridian; the afternoon prayer is called when the shadows begin to lengthen; the evening prayer is said shortly after the sun sets; finally, the night prayer ends the day several hours after sunset. The above applies to Moslem Persians and Indians as well as to the Arabs; obviously it does not apply to Hindus or sailors of other religions.

Eating is intimately related to Islamic religion for Arabs and other Moslem sailors, as their three meals come directly after the dawn, the morning, and the evening prayers. In the month of Ramadhan all faithful Moslems neither drink nor eat during the daylight hours; however, during Ramadhan all activities on land and on sea usually hit a low ebb. In other months breakfast consists for the Arabs of little more than a piece of unleavened bread with some sweet tea or water with which to wash it down. Lunch has more to offer, consisting of a mess of boiled rice with a flavoring of *ghee* (clarified butter) and curried or baked fish (if the ship has any fish aboard). The main portion of the meal is rice, which is served on a huge tray, or often simply on a palm leaf mat. The crew gathers around several of these trays or mats and makes quick work of the food, using no implements other than their right hand. They take a little fish (or meat if they are that fortunate), ball a small handful of rice around it and toss the ball deftly into their mouth, usually without losing a crumb. Nothing is ever wasted, as someone always scavenges the last morsel. Supper is essentially the same as lunch.

Often a feast is in order in port; this always calls for the slaughter of a sheep (or goat), a number of which are always kept alive on board. The sheep is usually slaughtered at dawn and is virtually dragged from its skin into a large iron pot, where it is boiled in water. The sheep or goat is the *pièce de résistance* and is served whole on a huge tray of rice. For a feast, a curry flavoring or raisins are often mixed with the rice. Various delicacies from the sheep, such as the heart, liver, lungs, and kidneys, are cooked separately and served in side dishes. As the feast starts, the sheep is methodically torn apart limb from limb and fiber by fiber. The meat is always eaten in the same manner: rice is balled around small bits of meat and tossed deftly into one's mouth with the right hand. In pulling

264 apart the sheep only the right hand may be used, as the Moslem left hand is reserved for less sanitary duties.

Towards the last of the feast, the host seizes the head, rips out the tongue, gouges out the eyes, removes the brain by smashing the head on the floor, and tosses these delicacies on the plates of the guests of honor. To one unaccustomed to the ways of the East, such a scene might look primitive and barbaric, and might remind one of a pack of animals crouched around their prey. It is true that the Arab meal lacks the decorum of a Western table and one needs more than a finger bowl when finished, but once one is accustomed to the Arab way of life, an Arab feast is most satisfying! Before and after the feast one is served the ubiquitous too-bitter Arab coffee and too-sweet tea. Often during the regular day, coffee and tea break the long hours between meals.

Villiers made a very careful survey of the food consumed for 270 days on a Kuwait *bhum* by the thirty men aboard. The total cost was 1502 rupees, which was an average of about 5.5 American cents per man per day (at a rate of exchange of $0.30 per rupee). Villiers' summary of the food consumption is as follows:[23]

262

Commodity	*Cost per Unit*	*Number of Units*	*Total Weight*[24]	*Total Cost Rupees*
Dates	3 rupees/package	40	3360 lbs.	120
Rice	8-10 rs/bag	55	8900	500
Flour	6 rs/bag	12	1800	72
Sugar	12 rs/bag	7	1570	84
Dried fish			500	40
Dhall (Indian Corn)	15-16 rs/bag	6	1010	90
Salt	2 rs/bag	3	670	6
Tea			110	50
Coffee			220	30
Ghee (clarified butter)	10-20 rs/tin	9	360	120
Saleet (oil)			400	50
Pickled stuffs			100	50
Chilis			80	10
Onions			1600	50
Potatoes			480	30
Cloves (for coffee)			40	5
Ginger (for coffee)			100	5
Tomato essence			40	15
Canned milk			150	20
Sesame seeds (for bread)			30	5
Lady-fingers and peppers				5

[23] Ibid., p. 427.

[24] These weights were estimated by this author, using the average weight of the units, i.e., packages (of dates), bags (which vary for every commodity), tins, etc., that were in common use in Aden in 1950.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

White radishes	100	5
Lemons	40	5
Other fresh vegetables	400	15
10 live sheep	1100	40
15 live sheep and goats	1500	80
		Total Rs. 1502

It should be noted that rice constitutes one-third of the cost. The other great staple at sea—fish—is not listed accurately, as most of it is caught fresh; probably between two thousand and three thousand pounds of fresh fish was eaten. It should also be noted that no charge occurs for water. The dhow will take a tank of bad water rather than pay for it.

The Arab dhow, regardless of its size, always has a fish-line overboard, and it is not uncommon to see half a dozen lines overboard. I have caught many fish myself trailing a line from a dhow in the Persian Gulf. Villiers[88] states that fishing off the whole African coast is particularly good and that it is not uncommon for the many lines trailed from a Kuwait *bhum* to net twenty to thirty large fish a day. The fish not eaten are cleaned by splitting, are pounded in salt, and then hung in the sun to dry; the sailors never bother to scale the fish.

The galley on an Arab dhow is simply a spot on the deck. The stove consists simply of an open-sided box with some sand and cooking stones on the bottom (see Plate 21—top left). The larger the dhow the larger the fire-box. The cook cooks everything here with wood fires of palm wood, brush, or driftwood.

On dhows of South Arabia and the Gulf of Aden ports there is also a bread oven. I have never seen these on dhows from the Persian Gulf or Gulf of Oman. The oven consists of a wide-mouthed pot perhaps fifteen or eighteen inches in diameter; this pot is put inside a barrel about two and one-half or three feet in diameter and the space around the pot is filled with sand (see Plate 21—top right). The barrel is firmly lashed together and then is usually securely lashed to the deck. To bake bread, the cook builds a fire in the bottom of the pot and allows it to burn down to the coals. Then he takes a flat piece of dough like a large pancake and pastes this on the inside of the pot; the heat in the walls of the pot and the coals bake the bread. This is the Arab *khubuz*, one of the staples of the Arab at sea as well as on land.

VI

It is difficult for one totally unfamiliar with the Arab East to understand the economic system of the Arabs. The tenets of Islam prevent any

[88] A. Villiers, 55, p. 130.

banking system, interest, usury, or insurance. The economy of the Arabs is built on a tremendous pyramid of debt which has the lowly sailor, fisherman, farmer, and coolie on the base and a sheikh on top; this system, which may well be called the 'debt system,' operates efficiently and effectively, but has been notoriously overworked in the case of pearling activities in the Persian Gulf.

At the start, a merchant will finance a *nakhoda* for building a deepwater dhow.[56] Thus the *nakhoda* is the *nominal* owner of the dhow, but he is indebted to the merchant. If the *nakhoda* had enough money to buy a dhow himself, he would finance someone else and become a merchant himself. This arrangement suits the merchants, for if the ship goes down, the *nakhoda* (or his family) must pay back the value of the cargo and the cost of the dhow as well. Thus the merchant has an 'insurance' on his investment. A merchant may have a dozen *nakhodas* so indebted to him.

The *nakhoda*, on the other hand, has all his sailors and crew indebted to him. He never pays them any regular wages, but gives them advances of food and money when they need it. Thus, as we saw above, the sailors have to make the sails and rig a new ship if they are to sail it. Only when the voyage has terminated six months or a year later, and the ship has been beached in the home port, do the sailors get their share of the earnings of the voyage. But by this time many of them have no share coming, as the *nakhoda* usually has advanced them more than their share amounts to, so he must give them another advance; this is to the *nakhoda's* liking, as he then has the sailors indebted to him. Once a sailor owes a *nakhoda* money, the sailor cannot ship with another *nakhoda* until the debt is paid. The sailors pay for only half of what they eat, for when it comes to the final accounting (if such a civilized term can be applied to the figuring), the total food cost is subtracted from the gross earnings.

The *nakhoda* receives about four or five times the sailors' share, while the mate receives about half as much as the *nakhoda*; some members of the crew receive a little more than the common sailors. The shares received by the twenty-seven men eligible for shares on the Kuwait *bhum* on which Villiers[57] sailed in 1939 are as follows:

	Value of Share	*Number of Shares*	*Total Shares*
Nakhoda (captain)	5	1	5
Mu'allim (mate)	3	1	3
Quartermaster	1½	3	4½

[56] Not everyone can become a *nakhoda*, for the *nakhoda* must come from a family which can pay the debt if the *nakhoda* should be unable to.

[57] A. Villiers, 55, p. 425.

426
465

Serang (boatswain)	1½	1	1½
Serang's mate	1¼	1	1¼
Cook	1½	1	1½
Steward (storekeeper)	1¼	1	1¼
Sailors	1	18	18
Total shares			36
Nakhoda's extra 4 and mate's extra 2 shares			6
Net shares for crew's half of dhow's earnings			30

The *nakhoda's* four and the mate's two extra shares are taken from the ship's part of the earnings. On the voyage that Villiers made, the ship grossed 9,600 rupees and spent some 1,500 rupees on foodstuffs; this gave a net earning of 8,100 rupees. Half of this was considered the crew's share for the voyage, so the thirty shares were worth 135 rupees each (after the *nakhoda's* and the mate's extra six shares were deducted from the total shares). The ship's expenses and upkeep, as well as the *nakhoda's* and the mate's extra shares, came from the dhow's earnings; the balance went to the merchant financing the vessel. If we assume that the yearly upkeep of the dhow was 1,000 rupees (which it never would be, as the crew does all the work on their share of the earnings), the owner's share on his investment of 12,500 rupees (the total original cost of the completed dhow) was 2,240 rupees, or approximately eighteen per cent. However, this is probably closer to twenty per cent, as the yearly upkeep probably did not run over 500 rupees. This would not hold up under strict accounting, as no depreciation has been charged off. Also no insurance on hull or cargo was carried as there are few if any Arab insurance firms. However, when Arab craft make return trips from India they usually insure the cargo with an Indian firm.

Villiers[58] estimates that the sailors might have netted twenty rupees extra in their own trading, that the mate might have made several hundred, while the *nakhoda* might have made a thousand rupees in his deals —mostly from Persian rugs and carved chests. Thus the owner received a twenty per cent return on his investment for the year, while the sailors received about 150 rupees ($45.00) then for a year's work. That seems rather unbalanced, does it not?

I have found the same general system of shares applying to pearling and fishing activities as well as to mariners in the Persian Gulf, the Red Sea, and along the coasts of South Arabia. In general, however, it is more

[58] Ibid., p. 426.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arab MK2

426 clean-cut in Villiers' case, as all the shares of the *nakhoda* and the mate
465 come from the crew's half of the net earnings. On the 240-ton *sambuk El Wafi*, which I boarded in Aden in 1950, the shares were as follows:[89]

	Value of Share	*Number of Shares*	*Total Shares*
Nakhoda (captain)	4	1	4
Serang (mate)	2	1	2
Sukkani (quartermaster or helmsman)	1½	3	4½
Muqaddam (boatswain)	1¼	1	1¼
Katib (clerk)	1½	1	1½
Wakil (steward)	1¼	1	1¼
Bahri or *mallah* (sailors)	1	33	33
Total shares			47½

In India some crews are paid on a salary basis, but many others work on a share basis. However, in India the owner takes one-third of whatever the ship earns. Then the craft's expenses while she was at sea and the supplies for the crew are deducted from the remaining two-thirds; the remainder is then divided among the captain and crew according to shares.[90] By dividing the profits in this manner the Indian owner gets about a quarter less than the Arab, while the Indian crew gets about ten per cent more.

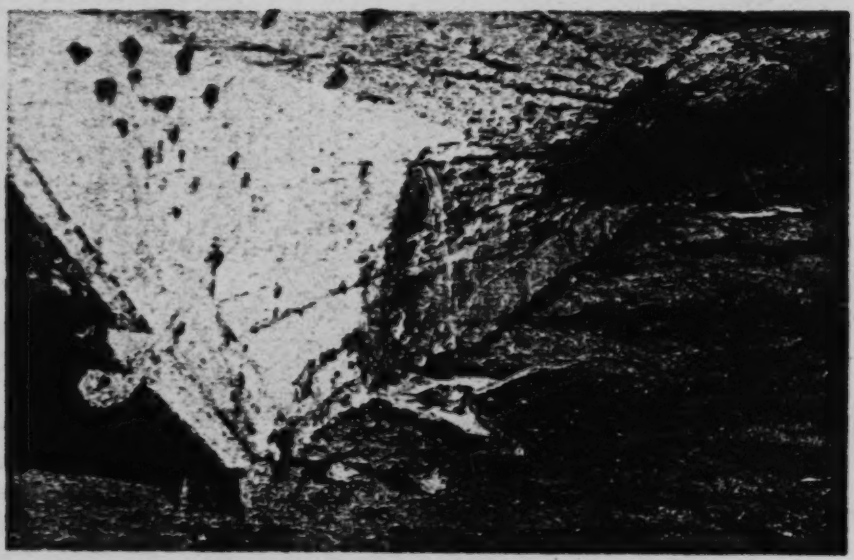
471 The largest importer and exporter in Aden, and probably the whole
426 Gulf of Aden for that matter, is A. Besse and Company, operated by a
465 shrewd Frenchman, Mr. Antone Besse. Among Besse's various holdings in the Middle East are twelve dhows, all registered in Aden. The *El Wafi* was one of the twelve *sambuks* owned by A. Besse, and operated in the Gulf of Aden and the lower Red Sea. On the average these dhows made four trips a month. The *nakhoda* was given advances, which he in turn gave to the crew, before each trip. After four trips the gross return for

505 [89] It will be noted that the Arabic names in Villiers' list of the members of the crew on a Kuwait
104 *bhum* and in my list of the members of the crew of an Aden *sambuk* are not the same; however,
114 this does not mean that either is necessarily wrong. The Arabic names on my list were checked from three independent sources in Aden, and my informants in Aden recognized Villiers' *muʿallim* as the word the Kuwaiti used for 'mate.' Villiers indicated on his list 'quartermaster' but did not give the Arabic for the word. The Arabic word that I found in use in Aden for this member of the crew was *sukkani*, which comes from *sukkan*, the Arabic for 'rudder.' Thus it would seem that the more proper translation of the word is 'rudder-man' or 'helmsman,' although his position on the dhow is really that of 'quartermaster.' The word *muqaddam* is the word commonly used on land to refer to a 'headman' who is the leader of any other group of working-men. However, on a dhow the *muqaddam* is the man who superintends the letting go and the weighing of the anchor, so the translation of the word when applied to seafaring men is properly 'boatswain.' The important fact evident from the two lists is that there is always a consistency in the top officers of a dhow—there are a captain, a mate, three quartermasters (or helmsmen), and a boatswain, irrespective of the Arabic name by which they are known.

[90] K. B. Vaidya, op. cit., p. 41.

PLATE 1

501



The dhow is usually not a very seaworthy craft. The photograph shows bilge water leaking through weak seams in the bottom of a large dhow drawn up on the beach

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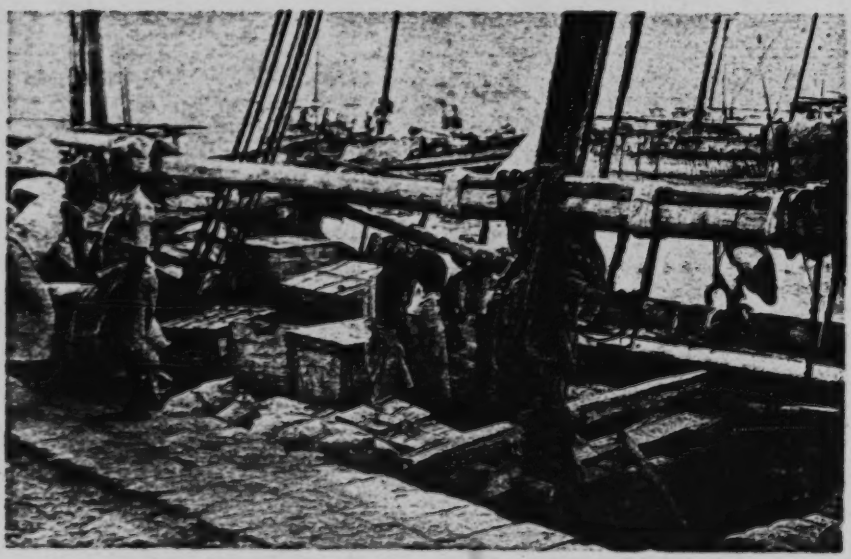

The crew usually does all the stevedoring. The photograph shows the crew of an Aden dhow loading the undecked craft for a trip to Djibouti. The cargo remains unprotected from the weather

Facing P. 196 (A)

PLATE 20

396

The crew that is to sail a new dhow must rig the ship and make the sails first. The photograph shows a set of sails being made at Aden

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283

Rope making is one of the odd jobs that crew members perform. Here an old sailor makes some rope using his toes as well as his hands

Facing P.196 (B)

501

The galley on a dhow is on deck; the stove is an open-sided box

An oven on a dhow (to the right of the water drum), made of a wide mouth pot put inside a barrel of sand

The toilet on a dhow is simply an open privy hung overboard

The toilet on a large dhow as seen from below

Facing P. 196(C)

4c Brown C-5 (1960) 1961 MK3 Maritime Arabs MK3

the cargo the dhow had hauled was figured and the cost of the food consumed by the officers and crew was deducted, giving the net earning of the dhow. One-half belonged to the crew and was divided into forty-seven and one-half shares as shown above. The other half belonged to the owner, and represented his return on his investment; the owner had to maintain the dhows from his half of the earnings. As we saw above in the case of the figures presented by Villiers, the owner has little to deduct from his share of the ship's earnings, so his return on his investment is considerable. It is little wonder that Mr. A. Besse was recently able to give Oxford University a contribution of £2,000,000!

Over one hundred years ago, the French Admiral F. E. Paris spent considerable time in the waters around Muscat and wondered how Arab ships could at that time compete with the more efficient European sailing ships. Paris summed up his conclusions as follows:

> ... les Arabs qui les montent habitués au retour périodique des moussons, n'exécutent, en general, qu'un voyage par an ... [ils] entendent bien le commerce; malgré cela, ils sont rarement employés par les Europeans ... et, comme ils ne prennent que de très-faibles cargaisons, ce n'est que grâce à l'extrême économie des Arabs qu'ils peuvent servir pour le commerce.[42]

Only a decade ago, one hundred years after Paris, men of other lands were still wondering how an Arab sailing fleet could possibly survive in the present era of oil and steam; to satisfy his curiosity Alan Villiers dedicated a year of his life to sailing with the Arabs in their dhows. Villiers has summed up the reasons for the survival of the dhow fleet as follows:

> One reason—perhaps the chief—why the ancient trade with the monsoons down the Indian Ocean not only survives but flourishes is that the dhows warehouse the goods they carry as well as transport them, and it suits the merchants better to have 10,000 packages of new season's dates divided among a fleet of dhows, than in the hold of one steamer which will unload the lot in a day or two, and flood the market. Ten thousand packages provide cargoes for at least five large dhows; the dhow master does not care how long he takes to discharge his cargo, for his overheads are trifling, his crew works on shares and handles all cargo, and his vessel pays practically no port dues.[43]

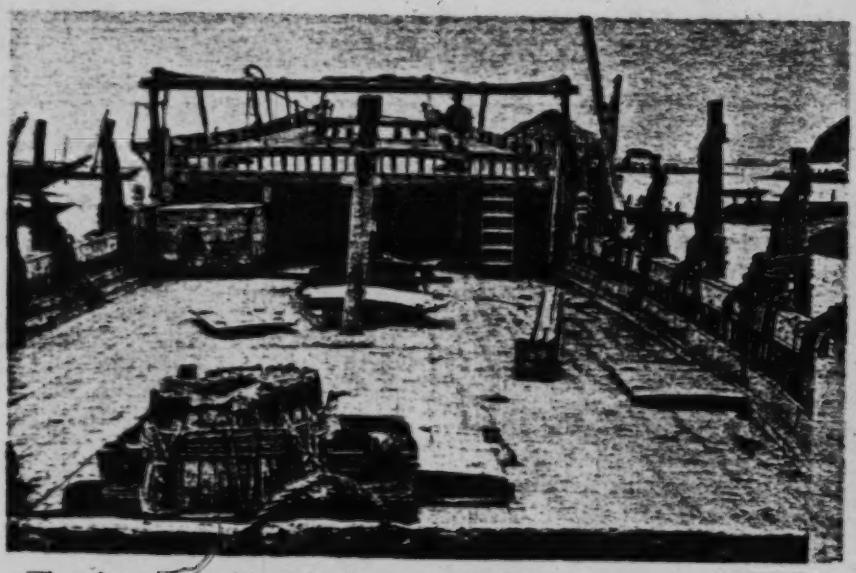
While in Aden in 1950, the writer investigated the intriguing problem of dhow economics, as applied to the coastal craft operating around

[42] F. E. Paris, *Essai sur la Construction Navale des Peuples Extra-Européens* (Paris, Bertrand, [1841]), p. 9. '... the Arabs who man them, accustomed to the periodic reversal of the monsoons, carry out, in general only one voyage a year ... they understand commerce well; in spite of that, they are rarely employed by Europeans ... and, as they carry only very poor cargoes, it is only because of the extreme economy of the Arabs that they can be of use for commerce.'

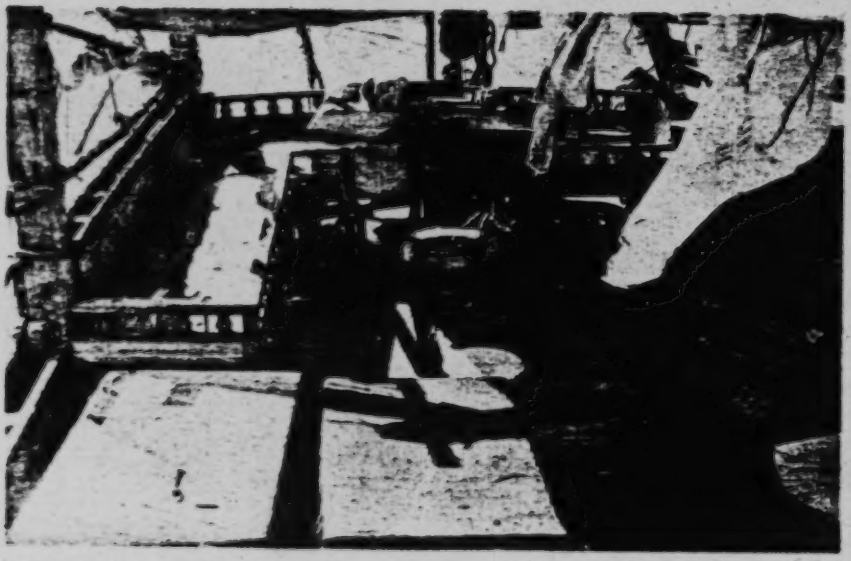
[43] A. Villiers, 'The Arab Dhow Trade,' *Middle East Journal*, II (1948), 400-401.

PLATE 22

501



There is usually a cabin under the poop, formed by the space between the poop deck and the extension of the main deck. Note the man on the poop for an estimate of size



The poop is usually cluttered up with sailors' chests, filled with cheap goods for trade. Note the binnacle, the only navigation instrument on the dhow, a large *baghla*

[Facing P. 197]

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

505 Aden. The twelve dhows mentioned above and owned by Besse have a gross tonnage ranging from 53 to 446, with an average gross tonnage of 181 and an average capacity of 150 tons. Six of the larger dhows have auxiliary diesel engines but the other six have none. Although engines might seem to conflict with the fatalistic attitude of the Arab sailor, the Arabs manage their engines very well. A summary which Mr. A. Besse furnished the author of the gross and cargo tonnage of his twelve dhows, all of the *sambuk* class, follows:[43]

Name	*Gross Tonnage*	*Capacity-Tons*
*Dawood**	446	400
*Galood**	330	300
*Wafi**	240	190
*Lateef**	225	200
Nufeed	189	180
Masheet	170	140
*Essid**	136	90
Nuthel	118	95
*Henkhles**	112	70
Kaid	75	70
Karn	73	70
Dharif	53	50
Average	181	150

* Indicates auxiliary diesel engine installed.

A. Besse sends these dhows to Mukalla (see Plate 23—bottom) and Shihr on the Hadhramaut coast; to Hodeida, Luhaiya, and Maidi in Yemen; to Qizan in Saudi Arabia; to Kamaran Island; to Massaua and Assab in Eritrea; to Djibouti in French Somaliland; to Zeila and Berbera in British Somaliland; and to Bender Cassim in Italian Somaliland. The most distant of these ports (Massaua) is about 450 miles away from Aden, while the nearest (Djibouti) is only 150 miles from Aden. The dhows operating in this 450-mile range from Aden average about four trips a month, and carry merchandise destined mainly for branches of the Besse empire, but also carry any other cargo they can obtain.

The Besse dhows have been known to make occasional trips as far away as Port Sudan and Jidda in the Red Sea (about 800 miles from Aden) and

[43] While the two sets of figures are not consistent in relation to each other, they do give an excellent general picture of the relative tonnages. In Besse's office on the Maala waterfront in Aden there was a large blackboard with the dhow names painted down the left-hand side and space to the right for information about their cargoes, port of destination, ETA's, etc. In the middle of the dhow list, a name had been scratched from the list. This represented a 150-ton dhow that had gone down in the Gulf of Aden in a storm; it had sailed out of Aden and has never been seen or heard from since. The dhow manager explained that the dhow had not been made in Aden, but in Africa, and was very weak; as an actual fact the other dhows belonging to A. Besse have a reputation for being the strongest-built dhows in the local waters.

Mogadiscio in Italian Somaliland (over 1,200 miles from Aden); to various Indian ports, which are between 2,000 miles (Karachi) and 2,500 miles (Bombay) from Aden, Besse's dhows have been known to have made an occasional trip.

The point of all this is that Besse has found it profitable to operate his dhows within a 450-mile radius of Aden, but no farther (see Figure 4).

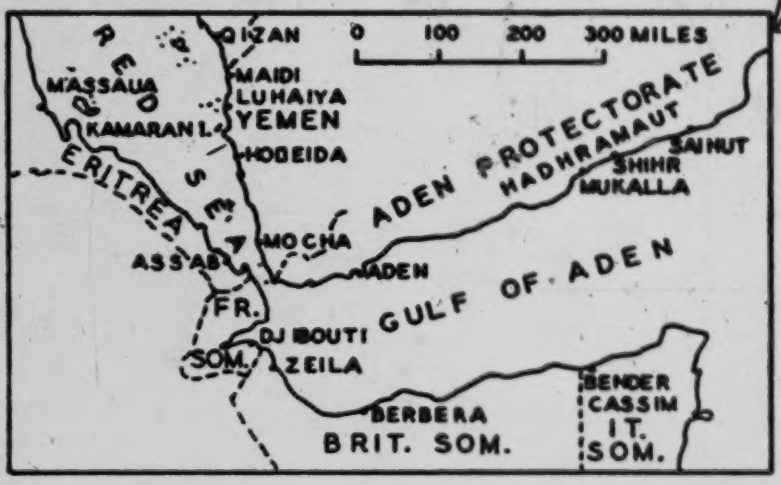


Fig. 4. Map of the southern Red Sea-Gulf of Aden area

The same is true of dhows from other ports in the area, for one finds Aden full of dhows from the same ports to which Besse sends his dhows, but few from ports farther away. Thus it seems that dhows can operate economically to and from Aden within a 450-mile radius. However, more cargo goes out of Aden by dhow than comes in by dhow, and many of the dhows from Yemen and the Somalilands come to Aden empty in the chance of picking up cargoes (see Plate 23—top). It should also be noted that most of Besse's dhows return to Aden empty after delivering their cargo in the 450-mile radius. The above does not apply to the deepwater ships coasting down from Arabia to Africa, as these ships make only one trip a year. The above case for Aden applies only to coasters which make a number of trips a year, always returning to their home port (in Aden or the 450-mile radius).

Vaidya[44] has estimated that in 1944 there were about 5,300 sailing

[44] K. B. Vaidya, op. cit., p. 17.

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

505 craft on the west coast of India engaged in coastal trade over the one thousand-mile coastline. These vessels averaged only about forty tons and carried on the average eight-man crews. It is extremely interesting to note that Vaidya[66] concluded that these vessels never made voyages to ports over four hundred to five hundred miles away, always staying within a five hundred-mile radius of their home ports. The only vessels that made longer trips were the larger craft from the Gulf of Cutch and the Sind coast, these craft carrying Indian trade to Africa, Arabia, and the Persian Gulf. Thus in India the same economic balance that is found in the Gulf of Aden governs the coastal trade. These coastal craft would rather return home in ballast than travel out of their arbitrary 'zone' for a cargo.

479 Admiral Paris thought that the dhows could exist in the face of more
465 efficient European sailing ships only because of the extreme economy of
505 the Arabs. Villiers thought that the main reason the deepwater dhow could still exist in large numbers in the present day of steam was in the main because of the date-storehousing ability of the dhow, which did not tend to flood the market with dates. However, as we have seen above, the 1949 crop of dates entered Aden under steam, rather than on Kuwait dhows.

No, the answer to the question is of a more fundamental nature than either Paris' or Villiers' reason. It is this writer's opinion that the main and only reason why deepwater dhows can survive in this day and age is the system of sailors' wages—the 'debt system.' The Arab capitalists' philosophy is 'Get a man in debt and then never pay him enough to get out of debt.' Certainly this is true about the deepwater Arab craft that sail from the Persian Gulf and the Gulf of Oman to Africa; the crews are paid once a year, so that by the time they do receive their pay the advances made to them usually consume most of their wage. This would tend to be less true if the sailors were paid more frequently. It is interesting to note that A. Besse operates his coastal dhows under the debt system and shares, paying off only once a month and giving out liberal advances in between to keep the sailors in debt.

However, this is not the most important factor keeping the large number of coastal craft operating in areas like the Persian Gulf, the Gulf of Aden, the Red Sea, and the west coast of India. These coastal craft provide a very valuable service by moving cargo in small amounts to ports not usually visited by steamers; steamers find it uneconomical to make short hauls of small cargoes. However, what may be considered a small cargo for a steamer may fill several dhows. In many instances these coastal craft furnish the only transportation to many small off-the-track ports.

[66] Ibid., p. 103.

4: Bowen C-S (1950) 1951 MK2 Maritime Arabs MK2

craft furnish the only transportation to many small off-the-track ports. In addition to this it must be remembered that the dhow (or other native coastal craft) can navigate shallow harbors and creeks, while a steamer could not get closer than several miles. Thus there will always be a place for these short range coasters. However, the future of the deepwater dhow is another question.

The debt system has worked for centuries to the economic advantage of those financing the dhows, and to the economic disadvantage of those working on them. It has been impossible for the sailors to break away, as they can never work for another *nakhoda* when in debt to one. There is only one way to break away, and that is to pay the debt. Becoming a farmer or a fisherman does not help, as they usually operate under the debt system also.

On its face in such a financial set-up the merchant has everything to gain and absolutely nothing to lose. In the case above (where the shares, and thus the sailors' wage, were worth about 150 rupees and the merchant made eighteen per cent on his investment on the dhow), if the dhow had made only one-half of what it had, the merchant would still have received about ten per cent on his investment, but the poor sailors would have received only 75 rupees ($22.50) as a year's wage. Thus the dhow can compete against steam only at a sacrifice of the unfortunate economic slaves sailing the dhow. The dhow sailors do all the stevedoring, maintenance work, and sailing for their lowly share of the dhow's earnings; if the sailors received a decent wage (even if only on Eastern standards), the deepwater dhow could not stay afloat as a cargo vessel. Coastal craft operating short distances do pay higher wages on the average than the deepwatermen.

However, the advent of the large oil companies in the Middle East has provided a means wherein the sailors can escape from the bonds of economic slavery. By making jobs which pay good money (on Eastern standards) dhow sailors are able to free themselves of their debts and become free men. We have seen above that the oil companies in Saudi Arabia and on Bahrein Island have decreased the number of boats the pearl fisheries can send out, as they cannot get divers to work for the wage they can offer. Kuwait has long been able to keep a large deepwater cargo fleet of *bhums* on the waters around the Indian Ocean because Kuwait had a surplus of cheap labor—there was little else to do in Kuwait besides work in marine activities. Now that the Kuwait Oil Company has made jobs available to the local Arabs, the cheap labor market is gone for the Kuwait *nakhodas*. Thus as the standard of living is increased and cheap labor

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

426 465 505 becomes no longer available, the deepwater dhow is doomed. The dhow cannot operate in competition with steam if it has to pay the sailors respectable wages; that is, as long as the merchants demand one-half of the dhow earnings.

511 While traffic in human cargo is virtually a thing of the past, the dhows that coast along the Arabian, African, and Indian shores still have slave crews on them. Although not owned bodily, the crews are bound economically to their masters, the *nakhodas*, while the *nakhodas* themselves are economic slaves of the merchants. But, while the crews get little actual compensation when the pay-off finally comes, they are happy and well-fed and have known nothing else. Allah is compassionate, and there is always a Paradise waiting for their poor souls!

4: Bowen C-5 (1950) 1951 MK2 Maritime Arabs MK2

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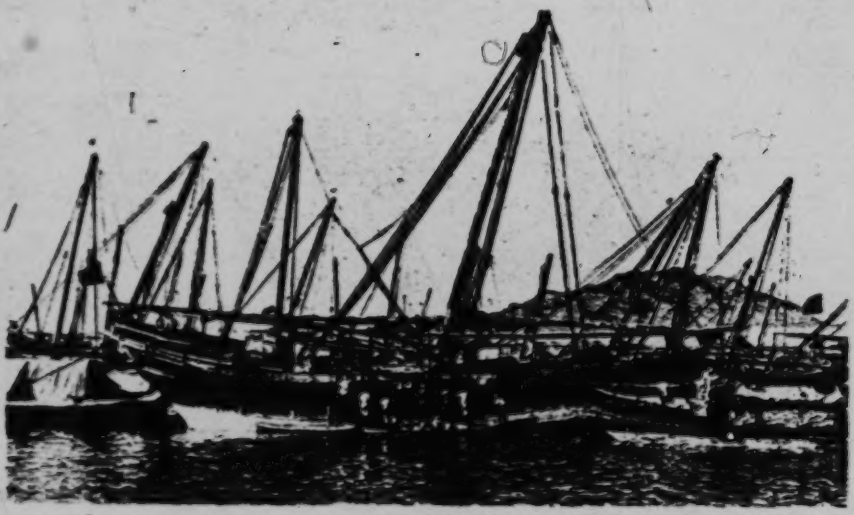

Dhows in the native anchorage at Maala in Aden. The large *baghla* in the foreground is discharging its date cargo with its longboat, the crew acting as stevedores

Dhows in the harbor at Mukalla at dusk. A *bedan* from Oman (with its sail up) is just slipping out of the harbor on its way down to Africa

Facing 8.202

181

/For data concerning the Arab dhow sailor and his view of life see full text in category 116. /